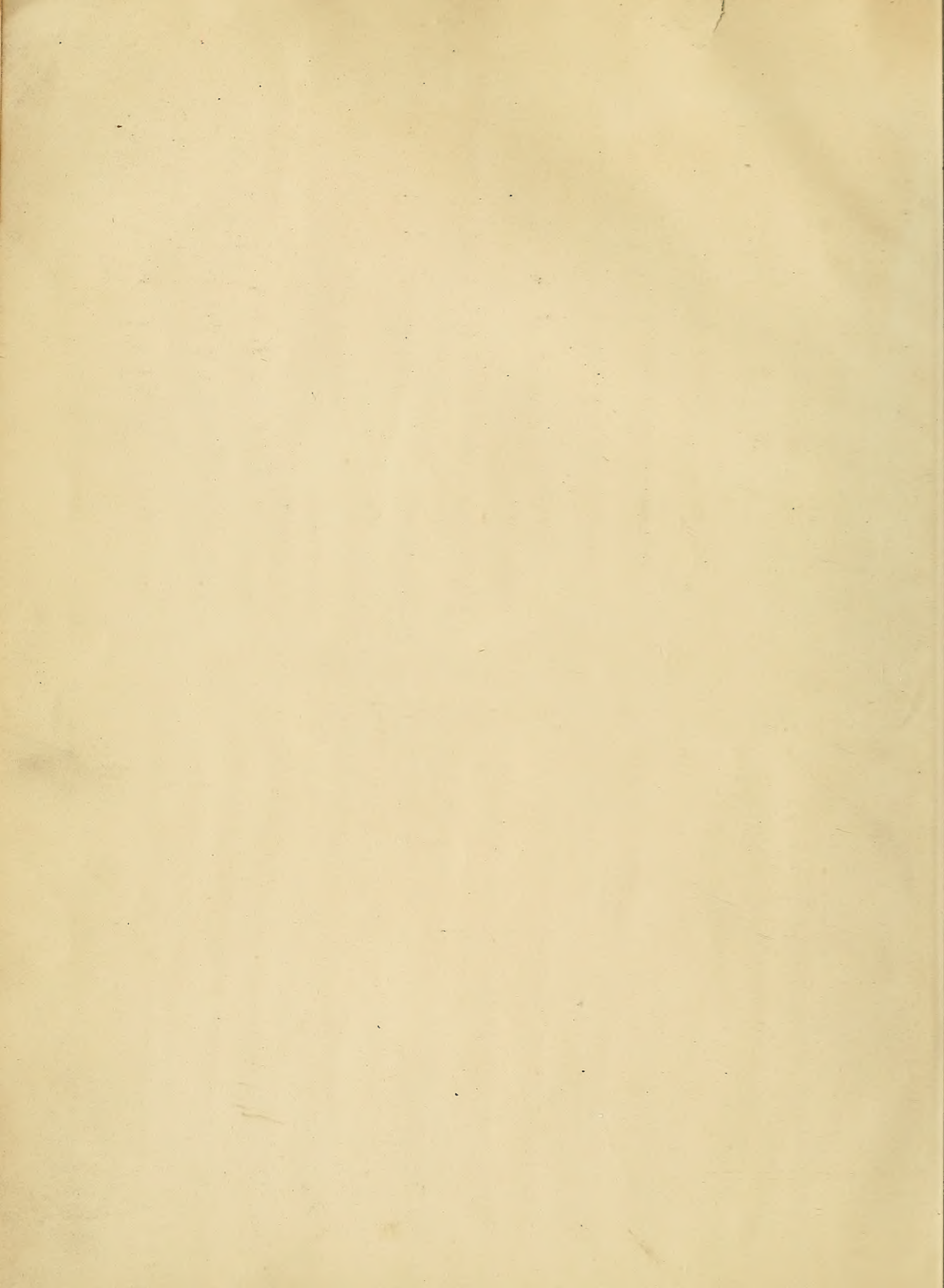


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THE

RAILROAD RECORD:

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
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PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD.—The earnings of this road for the month of January past, as compared with the same period last year, show a falling off in the item of freight transportation, caused by the mildness of the winter, and a large increase in the receipts from passengers. The following table exhibits a comparative statement of the receipts for January:

	1857.	1858.	
Passengers	\$46,585 76	\$54,678 73	Gain...\$ 8,092 97
Freight	23,624 22	12,555 03	Loss... 13,070 19
	\$72,209 98	\$67,232 76	\$4,977 22

N. Y. CENTRAL DIVIDEND.—The dividend of four per cent. declared by the New York Central Railroad Company on the 3d inst., is based on the following statement:

Earnings	\$3,901,077 37
Less Expenses	\$2,156,551 10
Less Interest on Debt	485,435 58
Less Sinking Funds	56,647 19
Other do	19,460 00
	2,718,083 85
Net Earnings	\$1,182,993 52
Four per cent. dividend	959,782 00
Surplus	\$223,211 52

Vol. 6.—No. 1.

MEMOIR ON OCEAN ROUTES BETWEEN ATLANTIC AND PACIFIC PORTS, BY CAPTAIN T. J. CRAM.

Since the time of Humboldt's great travels and his interesting sketches of Tropical America, the minds of many intelligent and sagacious men must have been turned on the problem—"What is the best and cheapest mode of getting from the Atlantic to the Pacific side of America?"

It is a grand problem. For many years the only mode deemed possible was by crossing the narrow Isthmus of Panama. The long and dangerous passage round Cape Horn was rejected, as impracticable for any great measure of commerce and emigration. Accordingly the first thing suggested was a Canal at the Isthmus of Panama, or Darien. In this subject, the House of Baring, Brothers & Co., took great interest. They, in connection with a French house, employed Engineers and surveyed the route. It is nearly twenty years since the writer of this article saw the most accurate drawings and estimates for a Canal across the Isthmus of Panama, made by French Engineers. For some reason, probably its immense cost, that scheme was abandoned. It was impossible to concentrate the interest of the public, or of capitalists on the barren wastes of the Pacific, till the great emigration to California took place. Then the rushing tide, rolling to the Pacific, made the fortunes of the ship owners, but called loudly on the world for a better way. The world turned its eyes on Central America, and capitalists made the Panama Railroad, and are again filling their pockets with its golden harvests.

But, the Panama route is by no means the best; and no route is the best, till we get the great Central Pacific Road. That is the ultimate of all reasonings on this subject; but, in the mean time, the ship route must be used, and partial Railroads, like that at Panama, must be made to aid in shortening the routes. This seems to be the object of Capt. Cram's very interesting Memoir. He evidently, at present, favors the shortening of the route from New York, by the Florida Railroad across the Peninsula, and the Tehuantepec route, in Mexico. As Captain Cram is a remarkably accurate and close observing man, it will be interesting to our readers to examine some of the data he has given to the public. The following facts in the engineering of the Panama Road, are interesting:

Suffice it to say, the steepest grade is about sixty feet to the mile, and that only for a short distance. As fast as the sleepers, which were pine, decay, they are renewed with lignum-vitæ. The short span bridges are of iron superstructure; and when the wood of the long ones decay iron is to be substituted. The abutments, piers and culverts are stone-masonry, such as should characterize all similar work—little for ornament, but every thing necessary for durability. The rails are sixty

lbs. to the yard. Large portions of the earnings of the road are being wisely expended in reducing grades, lessening curves, and ballasting the track with broken stone; and it is the intention to extend the Pacific terminus to deep water to obviate the present great inconvenience and danger in the mode of embarkation. The cost of the work was not less than \$7,000,000, and it may be well doubted if, under all the extraordinary difficulties it encountered, it could have been built for less by any constructing engineer under control of a Company so remote from the spot.

The next thing noted is the distance and time required by the Panama route.

DISTANCES AND TIMES,

As derived from the Log-Books of the Mail Steam-ships—averaging many trips, both ways running.

BETWEEN	MILES.	DAYS.
New York and Aspinwall	2352	10.5
Aspinwall, and Anchorage in Panama Bay	51	1.
Anchor, in Panama Bay and San Francisco	3775	13.5
NEW YORK AND SAN FRANCISCO	6218	25.

The next point investigated is the Rate of Speed in Steam-ships. It appears from the table, that the average of Steam-ships in the Caribbean Sea, is only ten miles per hour; less than on either the Mississippi, the Atlantic or the Pacific.

Of the Panama Route in its dangers and difficulties, he says:

Of the four routes, it is the Panama that involves the longest journey between New York and San Francisco, and the greatest vicissitudes in climate—requiring the passenger to go from 40 deg. 40 min. north latitude to a southern climate, within 7 deg. 13 min. of the equator, and thence northerly to 37 deg. 48 min. north latitude—making an extensive excursion from a cold to a hot, and from a hot to a cold climate in a short time. This, and the liability to yellow fever by any detention at Kingston, Aspinwall or Panama, have produced the impression that it is not a healthy route.

The horrible acts of violence—so revolting to humanity and too shocking to modesty to be written—which were committed upon the passengers in the spring of 1856 by the native people at Panama, can never be forgotten.

After examining the Nicaragua and Honduras Routes, Capt. Cram prefers the Tehuantepec to either of them. And, indeed, it only needs a map to see that if the Trunk road be made, it will be a short line from Cape Hatteras to the Port of Ventosa on the Pacific.

The route over the Isthmus is from the mouth of the Coatzacoalcas, up its valley across a dividing ridge, thence near by the town of Tehuantepec to Port Ventosa on the Pacific. From this port by sea-steamers, touching, if need be, at Acapulco to coal; thence following the same route as the Panama line pursues, to San Francisco, or indeed to all the ports above Acapulco.

It is evident from a mere glance at the charts, that the Tehuantepec route possesses peculiar advantages over the other routes, especially in regard to the commerce of the ports of the United States, both Atlantic and Pacific. For, although the runs in the Atlantic, from New York and the ports south until we reach Cedar Key, would be a little

shorter to the terminus of the Honduras transit, still, for all our ports farther south than Cedar Key, the runs would be shorter to the terminus of the Tehuantepec transit; and for all our ports on the Pacific the runs would be much shorter to the Tehuantepec than to either of the other transits.

Of the two harbors at either extremity of the Tehuantepec route, Capt. Cram thus speaks:

For the Atlantic terminus the harbor is the lower part of the Coatzacoalcos river for an extent of thirty miles. In relation to the bar at the mouth, I refer to the survey of Commander Lynch, U. S. Navy, in 1848, as published in a chart from the U. S. Hydrographical Office, which gives the depth on the bar $12\frac{1}{2}$ feet shoalest place at lowest tides. I also refer to an examination by Captain Foster—steam-ship Alabama—who has crossed the bar several times, and has given directions for entering the river under the worst winds that occur. He reports "the bar, by actual measurement, to be [from deep water on the inner to corresponding depth on the outer side] only 108 feet in breadth; the bottom, composed of sand and clay, is hard, and on this account does not shift; the general depth on the bar is not less than 12 feet, from which it deepens gradually to nearly 30 feet each way."

From the bar the Coatzacoalcos carries a width of one-fourth to one-third of a mile, and a depth of 18 feet at least for twenty miles above, and of 16 feet for ten miles higher up, at lowest stages, as shown by the soundings of Lieut. Alden, U. S. Navy, in 1847.

From this terminus to Ventosa on the Pacific, the distance is 166 miles. Here the harbor is VENTOSA, which is thus described:

La Ventosa, in its natural condition, presents a safe and commodious anchorage to vessels of all sizes. Locked on the west by Morro Point, and on the north by the land, it is only open to the south and east; and it allows ingress and egress irrespective of the quarter whence the wind blows. The depth at 350 feet from the shore generally is 17 feet. The bed of the sea recedes with a regular grade of two feet increase of depth per 100 feet horizontal, and the greatest observed difference between low and high water levels is $6\frac{1}{2}$ feet. There is little doubt of the Bay of Ventosa affording a much safer port than Vera Cruz, Mexico.

Such are the principal points of the Tehuantepec Route. Let us now return to the Florida Railroad. This is one of the works which will share in the recent grant of land for railroad purposes in Florida.

Of the Florida Road, Captain Cram says:

The realization of this road must now be regarded as a *fixed fact*, and as one of the most striking features in the systems of internal improvements of the States, so forcibly characterizing the age.

That it will be in successful operation across the entire neck of the Peninsula within a short time, can not be doubted. It has not only the means—and that too in abundance; of the very best kind assigned by the Congress of the United States, on which funds are raised as they are needed—but it is now being made for an extent of $137\frac{1}{2}$ miles between Fernandina and Cedar Key. From the very able Report by the President of the Company to the stockholders in 1855, I learn

"the grades in no place exceed 15 feet per mile, and the track is on an air line, and is to be laid with heavy rail." This is wise, and the superstructure once ballasted with broken stone, which can easily be done, the road will have the capacity of immense speed, and an express passenger train could make the whole distance in two hours and seventeen and a half minutes in safety.

Supposing all this done, we have the following table of results:

BETWEEN	MILES.	DAYS.	HOURS.
New York and Fernandina.....	909	2	4.
Fernandina and Cedar Key.....	137 $\frac{1}{2}$		14.5
Cedar Key and Minaitlan.....	1067	2	8.
Minaitlan and Ventosa.....	166		20.
Ventosa and San Francisco.....	2304	5	4.
NEW YORK AND SAN FRANCISCO.....	4583	11	2.5

We have now given an analysis of Capt. Cram's views and statements. It is clear, able, and convincing. But it is liable to one unanswerable criticism—that it is equally convincing that a *direct Railroad* from Cincinnati to the Pacific, would be far better than any plan suggested of Ocean cut offs. Again it may be said, with truth, that every fact and statement made is even more applicable to the route by Vera Cruz to Acapulco. COL. TALCOTT is now surveying that route, and if found practicable, it seems to us quite as likely to be made as any other.

Capt. Cram's pamphlet is useful and instructive. We are glad to find the officers of the army making their contributions to the public stock of useful knowledge.

CHICAGO, IOWA AND NEBRASKA R. R.

The annual meeting of the stockholders of this road was held recently at Clinton, Iowa. The following are the Officers elected:

Chas. Walker, *President*; J. Purdy, *Vice-President*; C. A. Lambard, *Treasurer*; G. W. Bourne, *Secretary*; M. Smith, *Engineer and Superintendent*.

Directors—C. Walker, Chicago, Ill.; L. B. Crocker, Oswego, N. Y.; J. T. Davis, Syracuse, N. Y.; J. Bertram, Salem, Mass.; C. A. Lambard, Clinton, Iowa; Oakes Ames, Easton, Mass.; A. H. Twombly, Boston, Mass.; A. S. Mitchell, St. Louis; L. M. Flourney, Paducah, Ky.; G. W. Ames, DeWitt, Iowa; John Weare, Geo. Greene, S. C. Burr, H. G. Angle, S. D. Carpenter, Cedar Rapids; J. Purdy, Mansfield, Ohio; J. C. Bucker, Clinton, Iowa; J. P. Hazard, Newport, R. I.; A. Myers, Syracuse, N. Y.; Cyrus Clarke, Buffalo; J. T. Boyles, Danville, Ky.

This road was organized in 1856 as the continuation of the Dixon Air Line Branch of the Galena and Chicago Union Railroad. It crosses the Mississippi at Clinton, and runs westward to the Valley of Cedar River—81 miles. The Company have now built and in operation 36 miles, and are laying the iron on six miles further. The entire cost of the work, as far as completed, with its present equipment, has been less than \$18,000 per mile.

BALTIMORE AND OHIO R. R.

We are pleased to learn that Wm. Prescott Smith Esq., has been appointed Master of Transportation of this road to fill the vacancy occasioned by the resignation of Dr. Woodside. Mr. Smith, has been for the past five years assistant Master of Transportation and receives his appointment in the regular way of promotion. Mr. Smith is in every way qualified for the position, both in experience and ability, and is better acquainted with the working of this road than any other person. His appointment is one which will satisfy the public. The following are the officers of the road as at present organized.

President, C. Brooks; Treasurer, J. I. Atkinson; Auditor, John King, Jr.; Paymaster, William S. Woodside; Master of Transportation, William Prescott Smith; Master of the Road, W. Bollman; Master of Machinery, Henry Tyson; General Ticket Agent, L. M. Cole; General Freight Agent, L. A. Gordon; General Western Passenger Agent, J. M. Sharp.

✂ We are indebted to Capt. L. M. Smith, of the Topographical Engineers, for a copy of the Coast Survey Report for 1856. It is a valuable document, and will be worth to the marine of our country all it has cost the government in its preparation.

✂ Our acknowledgments are also due to Hon. W. S. Groesbeck, for Vol. 4 of the Report on the Commercial relations of the United States. It is mainly through such works as these that the people can get any insight into the complicated machinery of our foreign intercourse, and they should be spread among the people with a liberal hand.

CROSSING THE MOUNTAINS.—The Baltimore and Ohio Railroad in running from the Atlantic slope to the valley of the Ohio, crosses several elevated mountain chains, the ridges of which it passes by means of tunnels of various lengths. That through the Board Tree mountain is nearly half a mile in length; the ridge above it being several hundred feet in height. The tunnel has been obstructed for sometime by repairs to the work of the tunnel. During this time the ridge has been surmounted by a series of Y's, on which the locomotive travels up grades of *five hundred feet to the mile*. There are seven Y's in the ascent and descent of this ridge. Its crossing by locomotives is one of the grandest triumphs of railroad engineering, and is a feat which has only been performed in this country. The locomotives used are the Winan's Cam'd Engines, and surmount these heavy grades nobly. The crossing of the Board Tree Tunnel is one of the grandest sights we ever witnessed.

Railroads.

RAILROADS IN VIRGINIA.

The following is the Report of the committee on Roads to the legislature of this state.

The Committee on Roads and Internal Navigation, to whom were referred various applications for appropriations to works of internal improvement, have had the same under consideration, and submit the following report :

The first point to which the attention of the committee was directed, was the condition of the finances of the State, because the propriety of making any appropriations to works, however meritorious, must necessarily depend on the ability of the Commonwealth to meet its engagements.

Your committee were satisfied from an examination of the report of the First Auditor, that under the existing rate of taxation, the revenue of the State will be sufficient to pay the interest on the public debt, and all the ordinary expenses of the government, and leave an annual surplus of over \$600,000, provided the treasury can be relieved of a floating debt of about \$1,200,000, arising out of the emission of treasury notes, a deficiency in the Sinking Fund, and certain acceptances of the Board of Public Works, in favor of contractors for work already done. These liabilities have been suffered to accumulate in the treasury for several years, and have become the cause of serious embarrassment. They do not properly constitute a charge on the revenue of the present year, but having been allowed to increase to an amount sufficient to absorb the whole surplus revenue for the present and next succeeding fiscal years, your committee have been compelled to consider, in the outset, how this burthen can be adjusted with the least injury to the public interests. If the whole of it be paid off in the years 1858 and 1859, it is obvious that there will be no means in the treasury to meet the interest on any further loan for improvements, and they must consequently, be suspended. This, in the opinion of our committee, would be followed by serious injury to the State, as many of the works in which the Commonwealth is largely interested as a stockholder, are now in a condition of great forwardness, and need but small additional appropriations to render the sums already expended beneficial to the public and profitable to the State. If arrested in their present condition, they must necessarily go to decay, and the outlay which has already been made will be lost, instead of becoming a source of revenue. An enlightened sense of economy therefore, as well as a sense of justice to individuals, who have invested their private means in these works, on the faith that they would be prosecuted to completion, alike demand, that if practicable, some appropriations should be made to carry them on.

In furtherance of this desirable object, your committee proceeded to enquire whether it would not be possible to adopt some measures by which the floating debt of the Commonwealth, instead of being discharged within two years, could be distributed through a series of years, so as to apply one-half of the surplus revenue, annually, to its extinguishment, and leave the other half unincumbered and applicable to the payment of interest on

such loans as may be effected for works of internal improvement.

Your committee are gratified to be able to state that they have had a conference with some of the officers of the three deposit banks in this city, and from the liberal and enlightened sentiments expressed by those gentlemen, they are satisfied that an arrangement can be made through those institutions by which the floating debt, or a large portion of it, can be distributed through a period of five years, one-fifth being paid annually, whereby one-half of the surplus revenue, or in round numbers, \$300,000, annually, will be left applicable to the purposes of internal improvement. And when the floating debt shall have been extinguished, at the end of five years, there will be, on the present basis of taxation, without taking into account any new subjects of taxation, or any increase of revenue from the enhancement in value of the present subjects, or any additional receipts into the treasury from improvements which may, in the meantime, have been rendered productive, an annual surplus of over \$600,000.

Assuming, therefore, that the present revenue justifies, and that sound policy demands additional appropriations for the prosecution of the system of improvements in which the State is already so largely interested, your committee proceeded next to consider the principles by which they should be regulated in their recommendations of appropriations for this object.

The wide-spread embarrassment which at this time pervades the country, the general prostration of business, and the natural distrust which springs out of the existing condition of things, concurred to admonish your committee that great caution was necessary in treating the subject of appropriations. A sacred regard to the honor and credit of the State required that nothing should be done which would tend, in the slightest degree, to impair confidence in the ability and determination of the Commonwealth, to meet all its engagements with the most scrupulous fidelity and punctuality. To this end it will be necessary to keep our appropriations within such prudent limits as will give an assurance to the public that we are not about to enter upon a system of reckless and extravagant expenditures, but on the contrary, that we are acting discreetly, having reference in the aggregate amount appropriated, to our ability to pay, and in the selection of the works to be prosecuted, to the revenue to be speedily derived, not only from the sums now applied to them, but from those previously invested. Your committee are persuaded that reasonable appropriations, regulated by these principles, will command the approbation of the constituent body, and will tend to strengthen rather than to impair confidence in the public securities of the Commonwealth.

In conformity with these general views, your committee are of the opinion that, in the present condition of the finances of this State, it would not be expedient, at this time, to undertake any new work of improvement, but that all our energies should be directed to the prosecution and completion of works already commenced, and on which large expenditures have already been made, and such auxiliary works as are of indispensable importance.

It appears from the report of the Second Auditor that the State is now interested as a stockholder in all the principal works in progress or completed. The following tabular

statement exhibits the extent of that interest in such improvement :

Covington and Ohio Railroad.....	\$1,500,000
Virginia Central Railroad.....	2,040,000
Orange & Alexandria Railroad.....	889,500
Norfolk & Petersburg Railroad.....	900,000
Manassas Gap Railroad.....	1,680,000
Alexandria, Loudoun, & Hampshire Rail- road.....	720,000
Richmond & York River Railroad.....	300,000
	\$8,029,500

No part of the Covington and Ohio road has been finished, though much expensive work has been done upon it. The tunnel has penetrated the Alleghany mountains, and many other serious obstacles have been overcome. An appropriation is now asked to put it into operation from Covington to the valley of Greenbrier river. This section can be advantageously used in connection with the Central road, and will afford important facilities to the trade of the counties of Greenbrier and Monroe, and accommodate the large number of persons who annually resort to the mineral springs of Virginia situated in that portion of the State.

The Richmond and Fredricksburg road, which has been in operation for about twenty-five years, and which is the only railroad in the Commonwealth which, in the just sense of the term, can be regarded as finished, because all its connections have been supplied, furnishes a striking evidence of the value and profit of a well conducted road.

All these roads are incomplete and will require further assistance from the State to finish them, and render the sums heretofore invested productive. Some of them are nearly complete and will need but little aid from the treasury. Others have made but little progress, and it would be unwise, under existing circumstances, to make large appropriations to finish them. All that can be expected in regard to this latter class, is to give such assistance as may prevent the destruction of the work that has been already done to keep it in progress, and where it is practicable, to put the sections of the roads which are nearly completed into profitable use.

The Central road has been completed to a point west of Jackson's river, in Alleghany county, a distance of 197 miles, and within nine miles of its western terminus.

The extension of the Orange and Alexandria has been graded three-fourths of the distance from Charlottesville, to Lynchburg, and when the road is finished it will supply the only deficient link in the chain of communication between Washington city and Memphis.

The Norfolk and Petersburg road has been graded throughout its whole extent, and all the bridges and masonry have been finished in a substantial manner. The rails have been laid half the way from Norfolk to Petersburg, and the ties, iron, spikes, &c., have been bought for the entire line. Engines, cars, and freight trains have also been contracted for, and with a small amount of assistance from the State, in the form of a subscription or loan, the whole line of road can be put into active and profitable operation.

The Manassas Gap road has been constructed, and is in operation from a point on the Orange and Alexandria road to the town of Woodstock, in Shenandoah county. A large portion of the grading, &c., has also been done between Woodstock and Harrisonburg, the southwestern terminus of the road, a distance of thirty-eight miles. When this road is completed, it will furnish the outlet for the productions of the large, fertile, and populous

counties of the valley which it penetrates. It now seeks aid at the hands of the General Assembly, to render available the large sums which the State has already invested in it.

The Alexandria, Loudoun and Hampshire railroad seeks a connection with the Baltimore and Ohio railroad near Piedmont, in the heart of the great Potomac coal region, passing through the rich and populous counties of Loudoun, Jefferson, Clarke, Frederick and Hampshire, which abound in mineral and agricultural wealth. The counties of Clarke and Hampshire have already made county subscriptions to the capital stock of this road, to the amount of \$100,000 each; and the town of Winchester also a heavy subscription. None of these subscriptions can be made available without further State aid.

This road will be the means of developing a large and valuable trade in Cumberland coal, and of stimulating the manufacture of iron; and will connect the city of Alexandria with the system of railroads penetrating the Mississippi Valley, and thus reduce, by more than fifty miles, the distance to Washington city. It will also bring the whole of North-western Virginia, which now has no means of communication through the State with the eastern part of it, and is wholly tributary to Baltimore, into direct connection with a Virginia seaport, with a saving in distance of nearly forty miles. The grading and masonry of this road has been nearly completed for the distance of forty miles, through the wealthy and densely populated county of Loudoun. A small appropriation now will enable this company to go on with its work, and tend to render the State's interest in it productive.

The grading of the Richmond and York railroad has been nearly completed. This road was projected to afford facilities for the conveyance, to the deep waters of York river, of the produce which may be brought to Richmond by the various railroads which concentrate at that point. It will secure to the city of Richmond a good port, readily accessible, and thereby relieve its trade from the embarrassments to which it is subjected by the circuitous and difficult navigation of James river. This work appeals strongly to the General Assembly for assistance to enable it to fulfil the purposes for which it was undertaken.

The Richmond and Danville railroad has been completed according to the plan originally projected, and is now fulfilling, in its career of usefulness, the most sanguine anticipations of its friends. It is proposed to extend it some distance south and west of Danville, to accommodate the trade of the counties of Henry and Patrick, and other counties west of them, and also to command the commerce of the Valley of the Yadkin, in North Carolina, and ultimately to seek a connection with the system of railroads contemplated by that State.

Besides these interests in unfinished roads, the State also owns larger amounts of stock in other roads, some of which have been recently finished. The State is a stockholder in the South-side road to the amount of \$803,500, and a creditor to the amount of near a million of dollars now. This road has been completed within a few years past, and sufficient time has not yet elapsed for a fair experiment of its value.

The amount invested in the stock of the Lynchburg and Tennessee road is \$2,300,000. This road has also been recently completed to the Tennessee line, where it connects

with a road already finished (with the exception of twenty-five miles now under contract and to be completed in May next) from the Virginia line to Memphis.

Although these roads are classed among the completed works, it would be unfair to estimate their utility or profit from the results of the brief experiments which have been made. We must await the further development of the resources of the country through which they pass, and the filling up of the chasms in the great system of improvements, of which they constitute important parts.

From a statement obtained from the officers of that company and which is appended to this report, it will be seen that it has, within the period of twenty-five years, reimbursed to the State the whole amount of its subscription, \$275,000, in cash, bonds of the company, and permanent additions to the value of the road, and the Commonwealth still retains its interest in the road, which there is good reason to believe will continue to yield large dividends to the treasury.

Your committee think it would be advisable to respond favorably, as far as practicable, to these several appeals for assistance. A million or two of dollars now judiciously expended, will give vitality to the twelve millions of dollars which the State has already invested in these works, and will convert that which is now dead capital into living and productive stocks.

To give effect to the above recommendations, your committee respectfully suggest the following appropriations.

To the Covington & Ohio road.....	\$800,000
Orange & Alexandria.....	300,000
York River.....	200,000
Norfolk & Petersburg.....	250,000
Manassas Gap.....	250,000
Alex'ia, Loudoun & Hampshire.....	300,000
Central Railroad.....	200,000
Extension of Danville.....	200,000
	\$2,500,000

In regard to the specific mode in which the relief is to be afforded, your committee do not deem it expedient to express any opinion. In some cases it may be given by direct appropriations, in others by loans, and in others by subscription, to the capital stock. A wise discretion will doubtless be exercised in framing each particular bill in such manner as to render the aid in the most efficient and acceptable form.

Your committee also recommend that when bonds of the State are issued for these several works, it shall be distinctly indicated on the bonds, or in some other suitable manner, to what particular road the proceeds are to be applied, and that they shall be accordingly so applied. A strong motive will thus be supplied to persons interested in particular improvements to purchase the bonds applicable to their own roads.

All of which is respectfully submitted.

MISSIONARY.—At a recent ministerial meeting the Rev. J. W. OSBORNE, Chaplain to the Illinois Central Railroad, in giving a sketch of the results of his labors says:—

Schools have been established at all the stations, and are in a flourishing condition, and the means of much good. Bible classes are large and numerous. Some of the children walk several miles to the schools. So far as the road is concerned, it is a wise business operation, by which the prosperity of the settlements along the road is advanced, and the lands of the company rendered more attractive to the most desirable class of settlers.

GALENA AND CHICAGO R. R.—The January earnings of the Galena and Chicago R. R., were:

1858.....	\$85,373 50
1857.....	86,969 27

MAD RIVER AND LAKE ERIE RAILROAD.

The President of this Company, John P. Yelverton, Esq., has issued the following circular to the bondholders of the road under date of January 1, 1858. As we are not in possession of the past Reports of the Company, we insert it without comment:

SANDUSKY, O., Jan. 1, 1858.

The bondholders of this Company must be aware that its embarrassments have been materially increased by the loss of traffic during the present stagnation of business, and that, therefore, the expectations of meeting promised payments and current interest have been greatly, but inevitably, disappointed.

The position of the finances is as follows:

LIABILITIES.

Mortgage bonds over due.....	\$ 218,000 00
Mortgage bonds due in 1866.....	1,000,000 00
Mortgage bonds due in 1875.....	1,000,000 00
Dividend bonds due in 1860 and 1862.....	223,500 00
	2,441,500 00
Bills payable.....	\$135,174 44
Interest accrued.....	10,000 00
Miscellaneous.....	75,000 00
	520,174 44

Deduct 1875 bonds as collaterals to bills payable.....	302,000 00
Total.....	\$2,659,674 44

On which the annual interest is.....	\$192,177
Rent S. C. and Ind. Railroad.....	33,420
Rent S. and Columbus R. R.....	10,500

Total interest.....\$241,097

The \$18,000 Bonds due May 1, 1855, should be paid at once; of the \$200,000 due July 1, 1856, \$50,000 must, by agreement with the holders, be paid on July 1, 1858. Of the floating debt a large portion is secured by the \$302,000 Mortgage Bonds; it becomes important to pay a part at least of this debt with the least possible delay, to prevent the sacrifice of the collateral, and consequent great loss to the Company. The balance of this debt is due, or maturing rapidly, and the holders pressing for payment.

Under these circumstances, parties largely interested in the Bonds have suggested that a small present sacrifice, that would enable the Company to pay off the past due Bonds and the floating debt, which, by a recent decision of Judge McLean of Ohio, is put on the same footing as that secured by mortgage, will give vitality and increased value to the securities that have not yet matured.

The plan proposed is simply that the holders of the Bond, except of these past due, shall agree to surrender coupons to the amount of \$500,000 in the following manner: The Company to pass one interest, but to pay the next promptly. On their doing this, the two coupons to be given up. This course to be continued until the above amount shall have been attained.

The effect would be, that for 3 1-2 years, the Bonds would draw but 3 1-2 per cent. per annum; but this would be paid promptly, as otherwise the Company would forfeit the benefit thus provided. By this concession it seems almost certain that the floating debt will be extinguished, and the credit of the Company be re-established.

JOHN P. YELVERTON, Pres.

FRENCH RAILROADS AND THE RHINE.

The following, which appeared in the "Times," on Wednesday, furnishes most useful information, and we have no reason to doubt the correctness of its descriptions:—

"The present year, which is drawing to a close has been one of the most unfavorable which the river traffic has for some time experienced. The drought of last summer reduced the Rhine, the waters of which are ordinarily so abundant, to the proportions of a petty river, and the navigation of the stream was often seriously impeded. The accidents were numerous. Frequent collisions occurred between steamers and sailing vessels. Several laden with merchandise went to the bottom. Some were with great difficulty raised, and many, in order to escape a similar disaster, took only half a cargo on board. There were some, too, that did not venture to leave the Rhenish ports, but remained idle greater part of the summer. At Mannheim, Mayence, Coblenz, Cologne, and Emmerich, the navigation was greatly interfered with, and the boats were laid up. This inactivity was, however, not wholly unattended by advantages. In certain parts the shallowness of the water allowed the execution of works which the Rhine in its ordinary state would render impossible. Near Bingen and St. Goar, for instance, rocks were blasted which lay in the bed of the river. These and other similar improvements did not, however, indemnify the parties interested in the navigation of the Rhine for the losses they otherwise sustained. It may be confidently stated that the official returns of the commercial movement of the Rhine for 1857 will show a falling off as compared with the average returns of preceding years, and that the deficiency of water has produced a result such as has not as yet been caused by the parallel lines of railroad on the right and left banks of the river.

"For a series of years the river traffic showed a rapid and sustained progress; in the course of 20 years it had more than doubled. Mannheim, for instance, where in 1836 the trade imports and exports amounted to 530,000 quintals, had, in 1856, 5,000,000. In 1836 the trade of Mayence was about 2,000,000 of quintals; it reached 3,000,000 in 1856. In the course of these 20 years Coblenz increased from 1,000,000 of quintals to 2,000,000, and Cologne from 4,000,000 to 7,500,000. Owing to the cause I have just mentioned, namely, the failure of the waters, that advance has met with a serious interruption. Of course, the receipts will offer a similar decrease. In 1835, the navigation dues of the Rhine produced 2,562,931*fr.*; in 1856, 2,910,548*fr.* The present year will certainly not be equal to 1856, nor even 1855.

"Comparatively with the receipts of the German offices, those of the French are low, and yet France expends considerable sums in the works she carries on for the security of the navigation and the promotion of the traffic. In 1856 the river States of the Rhine expended a sum of 4,400,000*fr.* in the conservancy of the channel and the banks. This sum was assessed as follows:—

	France.
Baden.....	891,000
Bavaria.....	130,000
France.....	914,000
Hesse.....	105,000
Holland.....	1,500,000
Nassau.....	110,000
Prussia.....	950,000

France then, contributes to a very large amount in proportion to the commercial interests she possesses in the navigation of the Rhine.

"The Central Navigation Commission, which some time back held its annual meeting at Mayence, took into consideration the lowering of the dues on vessels in the river. The delegates from Baden and Bavaria in particular insisted on that reduction, and they showed very clearly the inconvenience of the present dues, and the danger that would result hereafter from their continuance. They were supported by the French and Dutch delegates. Prussia was inclined to make concessions, but the representatives of Hesse and Nassau persisted in their wonted opposition to any material modification of the dues with a view to their reduction. Those two petty States, which only possess a small patch of territory on the Rhine, thus paralyze the favorable disposition of other States far more considerable.

"The consequences produced by this system of high duties on the Rhine are very severely felt. Formerly the transit trade of England with Switzerland was by the Rhine, and formed one of the most important resources of the navigation. Some years ago it changed, and now it goes by another route. The cotton embarked at Liverpool for Switzerland is forwarded from Havre by railroad to Basle, via Paris and Strasburg. In a short time the line from Paris to Mulhouse will open a new route for the transport of goods, and the Rhine will then be deprived of all its gains, to the profit of the French railroads.

"While the commercial development of the Rhine is thus deeply injured, the works of the railroad on the left bank, which will connect, by a direct line, Cologne and Strasburg, are actively going on. There is already a line of rails between Cologne and Bonn. The section from Bonn to Rolandseck was opened some months ago, and the one from Rolandseck to Remagen will be opened in a few weeks, that from Remagen to Buhl in the spring, and by next autumn we expect it will reach Coblenz. The only part wanting to complete the line on the left bank is from Coblenz to Bingen, and this will be finished in the course of 1859.

"The navigation of the Rhine has therefore lost one of its elements of activity—namely, the carrying trade, in consequence of the competition of the French railroads. If the river States do not suppress the dues the navigation is gone for ever. A continuous line of rail along the left bank of the river, and parallel to its course, from Cologne to Strasburg and Basle, will command the whole of the commercial movement between all the towns on the Rhine.—*Herapath's Journal.*

SOUTHERN PACIFIC RAILROAD COMPANY.

Since the notice we gave a day or two ago, of the progress of the Southern Pacific Railroad, we have received fuller accounts. They all concur in the statement that there is no doubt of the completion of the twenty miles required by the conditions of the charter within the specified time. Indeed, there is full reason to believe that it is, at this day, finished, equipped, and in running order.

The charter is, therefore, perfected; and the next point to be aimed at is the completing of the number of miles—required as a condition—for conveying to the company the lands which the State has granted. On the completion of twenty-four miles—only five miles more than are now, in all probability, in full operation—the company is entitled to receive sixteen sections for every mile; that is to say, four hundred sections, or 256,000 acres.

They will also have the right to a loan of \$6,000 per mile out of the school fund of the State of Texas—if they shall choose to accept it on the conditions of the law.—*N. O. Picayune.*

The Southern Pacific Railroad Company undertakes its road with vast advantages. The State of Texas is peculiarly well adapted by nature for the construction of a railroad. There are no high ranges to overcome for several hundred miles. The road when fully completed will not be subject to heavy damages and delays by snows and rains. The road can be used at all times of the year; this cannot be said of any route north of 38° or 39°.—*New York Courier and Enquirer.*

SOUTHERN MINNESOTA RAILROAD.

One of the directors in the above company informs us that the eastern division of the Root River Railroad will be put under contract early in the spring. That the La Crosse and Milwaukee Road will be completed in running order to the city of La Crosse during the present year, at which time the Southern Minnesota Company will have the backing not only of the land grant but of some two hundred miles of railroad across the State of Wisconsin, in pushing forward the great work west of the Mississippi river.

The Root River road will be commenced on the west bank of the Mississippi, opposite La Crosse, thence up the valley of the Hokah or Root River, via Chatfield, Pleasant Grove, Mantorville, Claremont, Rice Lake, Owatonna, &c. to a point of intersection near the Blue Earth river with the St. Paul, St. Anthony, Minneapolis and Big Sioux Road.

Our readers will recollect that the last mentioned Big Sioux Road and the Root River Road are owned by the same company, and although the grant requires the Root River Road to form a junction with the Transit Road east of range seventeen, yet the Root River Road being a continuation of a great chain of roads west, will be continued to the Big Sioux Road as above stated, and thence a few years on to the Missouri river.

This is one of the grandest systems of roads ever contemplated for any one State. When completed, which will be within a brief period, Southern and Central Minnesota will find a direct outlet east, via La Crosse, Milwaukee and Chicago—north into the pine region at St. Anthony, and southwest into the coal region of Northwestern Iowa. With these facts before us, who would not live in Dodge county? Mantorville may look forward with a perfect certainty of being an important town in a very important and wealthy region of country.—*Mantorville Express.*

BANK U.S.—We understand that the long pending suit of the Bank of the United States against the Philadelphia, Wilmington and Baltimore Railroad Company in which was claimed about \$135,000, has been compromised, settled, and discharged from the docket. The settlement is considered highly advantageous to the Company, removing, as it does, a claim for a very large sum, by the comparatively small payment of about \$20,000, at the same time dispersing a cloud which was regarded as threatening. The effect of this settlement will, no doubt, tend further to improve the credit of this Company, both the stocks and shares of which have been looking up for the last two or three months.—*Philadelphia Ledger.*

CANALS OF NEW YORK.

STATE OF NEW YORK :
CANAL DEPARTMENT. }
Albany Feb. 15, 1858. }

To the Legislature of the State of New York :

The Auditor of the Canal Department, as required by statue, submitted to the Legislature the

ANNUAL REPORT

Of the tolls, trade and tonnage of the canals of this State during the season of navigation for the year 1857, and all the matters and statistics which are required to be presented to the Legislature, will be found fully and particularly set forth in the accompanying tables. The additional tables and comparative statements which will be found at the close of the usual annual statistical information reported to the Legislature, have been carefully compiled from official documents in possession of the Auditor, in order to present in the same report, as far as was found practicable, a comprehensive view of the trade and tonnage of the lines of communication between the great lakes and the Hudson river and New York.

The whole amount of toll received is.....\$ 2,045,641

Which amount is composed as follows:	
Toll on boats and passengers.....	148,190
do. produce of the forest.....	478,862
do. animals.....	15,031
do. vegetable food.....	785,642
do. other agricultural products.....	3,504
do. manufactures.....	100,971
do. merchandize.....	342,410
do. other articles.....	171,041
	1,897,451

\$2,045,641

The whole amount of tonnage transported on the canals during the last season of navigation, ascending and descending, was.....3,344,061

And is composed as follows:	
Products of the Forest.....	1,364,002
do. Animals.....	16,553
Vegetable Food.....	747,227
Other Agricultural Products.....	3,590
	767,370
Manufacture.....	232,803
Merchandize.....	222,954
Other Articles.....	756,932
	3,344,061

The value of such tonnage is as follows:	
Products of the Forest.....	\$9,827,410
do. Animals.....	\$ 4,219,142
Vegetable Food.....	26,040,108
Other Agricultural Products.....	696,119
	30,955,269
Manufactures.....	9,330,067
Merchandize.....	74,633,905
Other Articles.....	12,250,267
	\$136,997,018

The total amount of Freight, or number of tons carried one mile during the last season of navigation, was.....484,750,864

The total movement of the several classes composing such tonnage is as follows:	
Products of the Forest.....	178,314,800
do. Animals.....	3,008,865
Vegetable food.....	154,288,875
Other Agricultural Products.....	564,750
	157,862,490
Manufactures.....	25,276,491
Merchandize.....	50,003,333
Other articles.....	73,293,750
	157,862,490
Total.....	484,750,864

The whole amount of tonnage arrived at tide water by way of the Erie Canal, from Western States and Canada, during the last season of navigation, was 1,019,998 tons. The whole amount of tonnage arrived at tide water, the produce of this State during the

same period, was 197,201 tons. The whole number of barrels of flour arriving at tide water through the Canals during the last season of navigation, was 835,546.

The whole number of bushels of wheat arriving during the same period, was 5,764,400, which turned into flour, calculating five bushels to the barrel,

Would make.....	1,152,890
Total.....	1,988,426

The whole number of bushels of corn arriving at tide water during the same period, was 5,515,928. The total number of new boats registered during the last year, was 329, with a total tonnage of 37,510, making an average tonnage of 114.

The number of lockages at Alexander's lock, for the season, was 22,182; and the greatest number of lockages at any one lock, was 25,699, at the Syracuse lock.

Comparing the season of 1856 with that of 1857, it shows a decrease in revenue of \$702,571, and a decrease in tonnage of 772,021, divided among the different articles as follows:

Products of the forest.....	114,672
Products of the animals.....	17,273
Vegetable food.....	406,367
All other agricultural products.....	1,363
	425,303
Manufactures.....	52,098
Merchandize.....	147,804
Other articles.....	32,144
	772,021

Decrease.....772,021

The decrease in lockages at Alexander's lock is 9,041.

In flour and wheat comprised in the returns of vegetable food, there has been a decrease in tonnage the past year of 185,017, and a decrease in tolls of \$253,290. In corn and oats, there has been a decrease during the same period of 167,084 tons, and a decrease in tolls of \$192,478. Under the head of "Products of the forest," there was a decrease in tonnage upon shingles, boards and scantling, as compared with 1857, of 98,638 tons, and a decreased tonnage upon timber, staves and wood, of 3,282 tons, and a decrease in pot and pearl ashes, of 7,753. Under the head of "other articles," there was increase in tonnage of mineral coal for the same period, of 21,386 tons, and a decrease in sundries, of 15,356 tons.

The interesting facts disclosed by the tables and statements herto annexed, if fully recapitulated, would swell this analysis to an unusual extent.

The Auditor deems it proper, however, to direct attention to the freight operations and business of the New York and Erie and New York Central Railroad line, in connection with those of the Canals during the past year; and with that view he has continued Statement No. 47, so as to embrace the year 1857. This table was first introduced into the Statistical Report from the Department made to the Legislature at the last session. The reasons for presenting these comparative results must be obvious.

It is not enough to show a large loss on the tolls, trade and tonnage of the Canals, without showing whence that loss arises, if in our power to do it. Comparing this freight business of 1856 with 1857 and we have these results:

	1856.	1857.
Tons carried by Railway.....	1,719,327	1,816,857
" " " Canals.....	4,116,082	3,344,061
Aggregate of both....	4,835,409	5,160,918

This statement shows an increase of 97,530 tons to the Railroads in one year, and a loss to the Canals for the same period of 772,021 tons, and an aggregate loss on both of 674,491 tons, or about one-ninth of the whole tonnage of 1856, whereas the loss to the Canals is a fraction below one-sixth of the tonnage that year.

	1856.	1857.
Total movement by Railway....	329,191,724	312,974,626
" " " Canals.....	592,009,603	484,750,864
Aggregate of both.....	921,201,327	797,725,490

The difference less in mileage on the two Railroads between 1856 and 1857 was only 17,217,098, while on the Canals it was 107,288,737. The total of the Railroad movement is nearly three-fourths of that on the Canals. The fact illustrated by these comparisons will be seen in its full force when we remark that tolls on the Canals, and freight on Railroads are paid on the mileage, so that the total receipts depend more on the distances than freight is carried than the quantities, as will be seen by the following statement compiled from the same table:

1856.	Tons moved 1 mile.	Freight & Tolls.
N. Y. Central R. R.....	145,733,678	\$ 4,328,041
N. Y. & Erie R. R.....	183,458,046	4,545,782
Canals.....	592,009,603	2,748,212
Totals.....	921,201,327	\$11,622,035
1857.		
N. Y. Central R. R.....	145,873,791	\$ 4,559,276
N. Y. & Erie R. R.....	167,100,850	4,097,610
Canals.....	484,750,864	2,045,641
Totals.....	797,725,505	\$10,702,527

Decrease in tolls on Canals since 1856, \$702,571; in freight receipts on New York and Erie Railroad \$448,172; increase on New York Central R. R., \$231,508. This shows the successful results of an active and vigorous competition.

The comparative tabular statement No. 48, herewith submitted, is a condensed view of the total tonnage and receipts of toll on all the canals on the different descriptions of property carried for the period of seven years.

	Tons carried.	Tolls received.	Av. per ton.
1851.....	3,582,733	\$2,075,992	58.86 1/100
1852.....	3,863,441	2,866,385	74.19 1/100
1853.....	4,247,853	2,955,097	69.51 1/100
1854.....	4,165,862	2,547,438	61.15 1/100
1855.....	4,022,617	2,410,420	64.89 1/100
1856.....	4,116,082	2,554,215	62.05 1/100
1857.....	3,334,061	1,897,451	56.91 1/100

The receipts of toll above given are upon the property carried on the Canals, exclusive of the tolls on boats and passengers, and the averages will depend upon the rates of toll charged and received, and the distance that property or freight is carried on the Canals. The average of 1851 on the tonnage of 1857 would have given \$2,862,623 94 of tolls; an addition of nearly one million of dollars, or in other words if the rate of toll and description of freight had been the same in both years, the State would have been a million of dollars better off, than it now is upon the amount of business done on the Canals.

But it is very apparent that the description of freights carried on the Canals the last year was mostly of that character which pays the lowest rates of toll, and has been such as would not bear the high prices of Railroad transportation.

The following statement shows the difference in tolls between 1851 and 1857 upon the description of property as classified in statement No. 48:

	1851	1857
Tons	12	91
Tolls	\$ 1,282	\$ 478,631
For and Peltry	946	1,363,990
Fur and Peltry	1,493,452	491,761
Fur of Wood	68,707	105,698
Co. Animals	1,048,083	1,298,132
Vegetable Food	7,783	747,927
Alcohol and Pro's	218,300	3,580
Manufactures	365,404	292,803
Merchandise	480,067	100,971
Other articles	3,589,733	292,954
Totals	3,589,733	3,344,061
		1,176,541

We are here presented with the remarkable fact that with a loss of only 238,672 tons carried on the Canals in 1857, compared with 1851, the difference in tolls is \$1,176,541 illustrating with more form than any other fact which can be put forward the mistaken policy of 1851 in releasing certain railroads from the payment of Canal tolls, and then in 1852 reducing the tolls on the Canals to meet the railroad competition brought into action by that release. The railroad tolls were not released to permit the diversion of trade to other channels outside of the State; but its effect was not only to enable a line of railroads subject to the payment of these tolls to compete successfully with another line soon to be put in operation which was not under its charter compelled to pay Canal tolls on property it might carry as freight, and to compete with the Canals in their legitimate business. The tolls on the Canals were not reduced in 1852 to permit the diversion of trade to any other channel than the railroads within this State and over which the Legislature at all times has held and can exert plenary authority.

The modification and the adjustment of the tolls in 1850 and 1851 was with a view to retain the carrying trade on the Canals which was supposed to be endangered by lines outside of the State and the increased traffic was such as to call loudly for a speedy enlargement and completion of the public works in order to be able to carry forward the masses of freight seeking transit through the State.

It will be apparent by an examination of these tables and statements that very much of the rolling compact freight paying the highest rates of tolls has been delivered from the Canals to other lines of transportation, and that but very little of that description of freight and that which requires large space remains to the Canals. The great bulk of freight carried on the Canals the last season was of that description which pays the lowest rates of toll. There is a small increase of tonnage on freight classed as "manufactures" and "other articles;" but there is a loss in tolls compared with 1851, on those articles.

The tolls on property classed as "Products of animals," consisting of pork and beef in barrels, bacon, cheese, butter, lard, tallow and lard oil, wool and hides has fallen off \$90,657 since 1851, and have become nearly nominal. A reduction of tolls on this class of freight

would not, it is believed, diminish the aggregate amount of revenue.

The aggregate loss of tolls on vegetable food and merchandize amounting to over one million of dollars, during the last season of navigation—compared with 1851, is mainly attributable, though not entirely to diversion by the railroads and the reduction in the rates in 1852.

The difference in toll on flour alone between 1851 and 1857 is \$528,646, and this sum we can fairly set down as lost by railroad competition, except so far as the railroad returns show a less number of tons of vegetable food carried in 1857 than in 1856. These two railroads carried only 35,411 tons less in 1857 than they did in 1856 of this description of property, and if we call the whole of it flour the loss would not much exceed 306,000 barrels, whereas one of these roads alone carried nearly 2,000,000 barrels in 1856.

The loss on merchandize can not be entirely charged to competition, as the reduction of tolls in 1852, on this class of property paying eight mills rates, was 50 per cent., and on that paying 5 mills 20 per cent., and the average of this reduction was 39.16 per cent. The per cent. of reduction in tolls on down freight was 4.515.

The Auditor is not forgetful that due allowance must be made for the revulsions in trade, and the disturbances in financial matters, with which we were visited during the last season; and that these have been more seriously felt in the canal, than the railroad traffic, he supposes there can be no doubt, after a full and careful examination of the results of the year's business just closed.

The fact, nevertheless, that the gross amount of tolls collected in 1857 is less than the receipts in 1843, can not, it is believed, be overlooked, and it is hoped, will lead to a careful and thorough examination in regard to the subject of our canal finances, and their adjustment to meet the demands upon them.

Respectfully submitted,

N. S. BENTON, Auditor.

MUTILATION OF BANK NOTES.

Below we give the report of a case in which the Court of Appeals of the State of Kentucky settles the principle on which banks are to be held responsible for their mutilated notes. It is one of considerable interest to the community.

STATE OF KENTUCKY—COURT OF APPEALS.

DECEMBER 9, 1857.

The Northern Bank of Ky. } Appeals from the
vs. } Fayette
The Farmers Bank of Ky. } Circuit Court.

The Court per Duvall, Judge, delivered the following opinion:

This was an action by the appellant against the appellee to recover \$106, the principal and interest of a note for \$100, purporting to have been issued by the Farmers Bank.

The answer of the appellee is substantially this: that the note sued on since it was issued, had been fraudulently mutilated and altered in a material part by some person who was at the time the holder thereof, that such holder fraudulently tore off from said note, a large part thereof including part of the name of this bank, the words promising to pay, part of the statement of the sum to be paid, part of the statement of where the note was to be payable, the date of the note, the signature of the President with a considerable portion of the engraving and lettering upon said note that had been put thereon to give it identity, and to protect the community generally, and the defendant particularly, against the counterfeiting of such notes; that the portions of said note so torn off, were in part replaced by parts of other similar notes of the defendant which had in like manner been mutilated with the same fraudulent purpose in part by other engraved pieces of paper, all which

were applied to the remains of the original note to conceal the mutilation thereof; that all this mutilation, alteration and patching was done with the fraudulent purpose of forming and forging a certain number of defendant's notes, a larger number of notes, each of which should contain a part of a genuine note, and all of which were intended to be passed on the community as genuine bank notes and as such defendant was required to redeem them, that this alteration, etc., was done without the knowledge or consent of defendant, but solely against its will and to the great detriment of it and of the community generally, that the plaintiff received said note for full value after it had been so altered and mutilated with such notes of the fraudulent mutilation and alteration as the mutilated appearance of said note affords.

The Circuit Court overruled a demurrer to the answer, and to reverse that judgment the Northern Bank prosecutes this appeal.

The sole question to be considered, therefore, is whether the facts set forth in the answer, (admitted to be true by the demurrer) are sufficient to exonerate the appellee from any liability upon the note sued on.

Although the notes of our incorporated banks are issued with intent that they shall circulate as currency or money; and do usually pass and are received as such, yet they are to be regarded for many purposes as the evidences of debts due by the bank to the holder upon which the latter may sue and recover by appropriate action. Hence it has been held, that when a bank note has been lost or destroyed, the holder may be allowed to prove its contents, and if this be satisfactorily made out, he is entitled to recover, or if the note be not lost, but is but merely impaired by accident, or even by design, if such design be not to injure the maker or to cancel the debt, the principal of law is the same. *Martin vs. Bank, U. S. Wash. C. Report, 253.*

Upon the same principle it was decided by this Court in the case of the Commonwealth Bank vs. Benedict, etc., (summer term, 1857), that the cutting of a bank note into two parts for the purpose of remitting them separately by mail, does not discharge the bank from the debt, but that it may be received by the holder of one of the parts upon sufficient proof that the other has been lost or destroyed and that he is the true and bona fide owner of the debt.

But it is quite obvious that these principles have no application to the facts of the present case. The note in question was not mutilated by accident nor for an innocent or honest purpose; on the contrary the admitted object and necessary effect of the mutilation, was to defraud the bank and to injure the community. It is shown that by the ingenious contrivance described in the answer, a large number of notes, each containing a part of a genuine bank note, was manufactured by the fraudulent holder or holders, all of which are intended to be passed on the community as genuine bank notes, and which the appellee will be compelled to redeem. It appears, moreover, that those portions of the note, most essential to its validity or identity, had been torn off for the fraudulent purposes mentioned; consisting of part of the name of the bank, the words promising to pay, part of the statement of the sum to be paid, of the place where payable, the date, the signature of the President, a portion of the engraving and lettering by which it was intended to give identity to the note and to protect the community and the bank against counterfeiting and fraudulent alterations; that the portions so torn off were replaced by other engraved pieces of paper and by parts of other similar notes of the appellee which had in like manner been mutilated with the same fraudulent purpose, all of which were applied to the fragments of the original note to conceal the fraudulent mutilation to which it had been subjected.

It seems to us that the simple statement of these facts is sufficient to demonstrate that the safety of the community, and the just rights of the bank, alike require that the law should interpose the protection against forgeries and frauds of this character, the result of which must be inevitable loss and injury to both. Such protections are not at all inconsistent with the rights of the innocent holder of a genuine bank note. Those rights it is the policy of the law to guard with the utmost vigilance, and hence we would by no means be understood as deciding that any and every mutilation or impairment of a bank note, however fraudulent the purpose with which it was done, would have the effect to discharge the bank from liability upon such note in the hands of a bona fide holder. The case before us involved no such question.

But it can hardly be said that the appellant occupies the attitude of an innocent holder. On the contrary it seems to us that the facts authorize the inference that the note itself must have presented upon its face such unmistakable evidence of fraud and forgery, as amounting to notice, or at any rate such as ought to have deterred any reasonable, prudent person from receiving it in the ordinary course of business.

In any aspect of the case, therefore, we are satisfied that the facts set forth in the answer constituted a valid defense, and that the demurrer was properly overruled. It is, therefore, adjudged, that the judgment be affirmed.

PENNSYLVANIA RAILROAD.—A memorial has been presented to the legislature of Pennsylvania, praying that the tonnage tax on the Pennsylvania Railroad, and the Harrisburg Railroad may be abolished. The memorialists claim that its effect is injurious to the commercial interests of Pennsylvania, and especially to the cities of Philadelphia and Pittsburgh.

EXTRACTION OF THE PRECIOUS METALS.—A method, possessing some novel and valuable features, has lately come into use in the treatment of ore containing the precious metals. The quartz is first broken into small pieces, then immersed for about two hours in a hot solution of caustic soda or any other alkali. After this, the ore is removed from the alkaline bath and subjected to a white heat in a muffle retort, or other suitably constructed furnace. While under this heat the alkali will become fused, and, forming a flux, will facilitate the fusion of the metallic matter contained in the ore, and the separation of the precious metals from their combinations. Another part which this flux plays is to cause the small particles of gold or silver to agglomerate in large beads on the surface of the broken pieces of ore, and thus to prevent loss of the precious metals by sublimation. The ore, having been subjected to a white heat sufficiently long to reduce the gold to a pure metallic state, is discharged into cold water, whereby it is rendered very fragile, and capable of being readily reduced to powder. The precious metals may then be separated by any of the washing or amalgamating processes in ordinary use.

CROSSING RAILROAD TRACKS—IMPORTANT DECISION:—The Supreme Court of Pennsylvania, Judge Woodward presiding, has just decided an important suit involving the liability of railroad companies, for injuries sustained by persons in crossing the tracks of railroads.

The judge charged as follows:—"1st. That a person about to cross a railroad track, is in duty bound to stop and look in both directions, and listen, before crossing. 2d. That if the plaintiff contributed in the slightest degree to the accident in question, he could not recover, although the railroad company were negligent."

SOUTHERN PACIFIC RAILROAD.

This company completed its first twenty miles in the time required by the charter. Its numerous stockholders will therefore be pleased to hear that its chartered rights are secure. There remain yet five miles to be completed before the company will be entitled to receive its land and the state aid of six thousand dollars per mile. We understand that these five miles are nearly finished.

MONETARY AND COMMERCIAL.

As we approach the close of the month, we observe a gradual tightening up of the markets for money, and a disposition to exact higher rates. Currency is, however, in fair supply, and the bankers are generally pretty easy. We quote rates of discount at the regular houses 10 to 12 per cent. Outside 15 to 24. We hear of a good deal of money to loan on first class real estate. The security, however, must be considered ample.

The bill for the extension of the charters of the Kentucky Banks has passed the Legislature, and become a law. The Bank of Louisville, the Bank of Kentucky, and the Northern Bank of Kentucky have each been re-chartered for twenty years. The Capital of the Commercial Bank has been increased \$600,000, and the Bank is allowed two additional Branches.

The Michigan Central Railroad Co. has given notice that all over due claims will be paid on presentation at the office of the Company.

The President of the Green Bay, Milwaukee & Chicago Railroad has issued a circular in which he states that the interest on the Milwaukee City Bonds given this Company, has all been paid, except on some nine or ten bonds, which were obtained fraudulently.

The Committee of persons interested in the Mad River and Lake Erie Railroad have reported a plan for relieving the road from its difficulties. Its main features are the surrender of certain coupons, and the agreement to surrender others as they became due.

We subjoin our usual quotations from Hewson and Holmes' Stock Circular:

The movement of the Stock Market since our last Circular has been quiet, with limited sales, but tending steadily to a further advance in all classes of Railroad Securities. Holders of several leading stocks are looking for an early advance, and are indisposed to sell at present going rates.

Little Miami shares have been steady and in demand, at 75; Columbus & Xenia at 72 @ 73; Hamilton & Dayton Shares have sold at 45, and Indianapolis & Cincinnati at same figure. This is a decided advance on the prices of both of these securities two weeks since.

Bonds have moved off at steady prices, varying but little from those current last week. Covington & Lexington, second mortgage, have sold somewhat freely at 55, March coupon off. Hamilton & Dayton, second mortgage, at 70, and first mortgage at 80; Indianapolis & Cincinnati, second mortgage, at 75.

Many holders of both bonds and stocks are not offering them for sale, looking to an early establishment of better prices. Thus far our market has been free from excitement; the improvement realized is the natural consequence of the altered and improved condition of the money market, and the better prospect of the Railroad interest, growing out of the revival of business.

The mercantile business is gradually improving, but is yet on a greatly reduced scale as compared with last year.

Money has been in active demand, but all good paper offered has been readily taken, at 10 to 12 per cent., second, and third class names go very slowly, at 2 to 3 per cent., per month.

Eastern Exchange has been in liberal supply rather larger than the demand has absorbed. Rates, however, have been well sustained. We quote $\frac{3}{4}$ to 1 per cent., premium. New Orleans funds have been in active request, at 1 to 1 $\frac{1}{2}$ premium, Gold $\frac{1}{2}$ to 7-8 premium.

SALES AT THE NEW YORK STOCK BOARD—Feb. 20.

\$1,000 U. S. 6's, '67	115
3,000 Ill. Int. Imp. '47	93
2,000 Ind. St. 5's	84
5,000 Tenn. State 6's, '90	88
5,000 North Carolina State 6's	94
16,000 Miss. 6's	83 $\frac{1}{2}$
3,000 Virginia 6's	91 $\frac{1}{2}$
1,000 N. Y. C. B's, '76	97 $\frac{1}{2}$
1,000 N. Y. C. 7's	101
2,000 Erie 3d M. '83	87 $\frac{1}{2}$
11,000 Illinois Central R. R. Bonds	94
26,000 Misso. 6's	97 $\frac{1}{2}$
5,000 N. Y. State 5 $\frac{1}{2}$'s, '61	102 $\frac{1}{2}$
350 shares New York Central	86 $\frac{1}{2}$
100 Shares Erie R. R.	33 $\frac{1}{2}$
155 " Hud. River R. R.	27 $\frac{1}{2}$
500 " Harlem R. R.	13 $\frac{1}{2}$
1350 " Reading	62
375 " Mich. S. & N. Ind.	26 $\frac{1}{2}$
50 " Panama	103
50 " Galena & Chicago	94
820 " Cleveland & Toledo	47 $\frac{1}{2}$
25 " Chicago & Rock Island	79
100 " Milwaukee & Miss.	37 $\frac{1}{2}$
200 " Cleve. & Pitts.	15 $\frac{1}{2}$
16 " LaCrosse & Milwaukee	11 $\frac{1}{2}$

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE.

BY HEWSON AND HOLMES,

February 24, 1858.

BONDS.

\$12,000 Cov. & Lex. R. R. Co. 2d Mort.	
Bonds, March coupon off	55
\$10,000 Cov. & Lex. R. R. Co. 3d Mort.	
Bonds	35 and int.
\$5,000 Little Miami R. R. Co. 6 per cent.	
Bonds	75 "
\$2,000 Indianapolis & Cincinnati R. R.	
Co. 7 per cent. 2d Mort. Bonds	75
\$5,000 Cin., Ham. & Dayton R. R. Co. 7	
per cent. 2nd Mort. Bonds	70
\$1,000 Cin., Ham. & Dayton R. R. Co. 7	
per cent. 1st Mort.	80
\$1,200 Col. & Xenia R. R. Co Dividend	
Bonds, due 1860	85 $\frac{1}{2}$
\$3,000 Fayette Co., Ky. 6 per cent Bonds	62
\$4,590 Certificate of Dep. with Commissioner of Ky. Trust Co. Bank, on which there is 25 per cent. paid	40 $\frac{1}{2}$

STOCKS

160 Shares Little Miami R. R.	75
25 " Cin. & Ham. & Dayton	45
120 " Indianapolis & Cincinnati	45
40 " Columbus & Xenia	72
28 " "	73

LONG ISLAND R. R.

The annexed statement gives the condition of the stock and debt of the Long Island Railroad Company on the 30th September last:

Capital Stock, as by charter	\$3,000,000 00
Amount of Stock subscribed	2,900,000 00
Amount paid in, as by last report	1,875,148 28
Total amount now paid in of capital stock	1,872,715 79
Funded debt, as by last report	641,517 73
Total amount now of funded debt	839,891 73
Less to apply on sinking fund \$20,994 98	
Floating debt as per last report	15,256 11
The amount now of floating debt	15,000 00
Total amount now of funded and floating debt	654,892 03
Average rate per annum of interest on funded debt, six per cent	

The cost of the road and equipment was \$2,565,792 07. The road is 95 miles long. The number of passengers arrived during the year was 387,135, and the tons of freight 81,320. The expenses of maintaining the road and real estate were \$43,625 61; repairs of machinery, \$37,756; operating the road, \$121,901.

EARNINGS AND CASH RECEIPTS AND PAYMENTS.

EARNINGS.

From Passengers	\$195,083 43
From Freight	116,177 30
From other sources	6,981 24
Total	\$318,241 97

The above to be stated without reference to the amount actually collected.

RECEIPTS.

From Passengers	\$195,083 43
From Freight	116,177 30
From other sources, specifying what, in detail, as follows, viz:	
Unloading freight	4,331 24
Mail Service	6,450 00
Real Estate sold	1,833 00
Interest and Rent	1,092 00
Old Materials sold	251 18
Total	\$335,220 15

PAYMENTS, OTHER THAN FOR CONSTRUCTION.

For transportation expenses	\$203,283 37
For interest	34,125 06
For dividends on stock, amount and rate per cent.	41,074 26
To payments to surplus fund	23,432 49

Land Purchase.....	\$1,000 00
Old Fire Bonds paid.....	1,325 00
Rogers' Locomotive Works, (old account).....	896 12
Equipment (new).....	9,500 00

13,112 12

Total.....\$315,027 30

The dividends alluded to are probably the payments on the lease of the Jamaica Road.

BANKS IN ILLINOIS.

There are forty-four Banks in Illinois with an aggregate circulation of \$5,238,000, which is secured by a deposit of State Bonds of \$6,161,000, being an excess of security over the circulation of \$943,325.

Of the suspended banks, the auditor is now redeeming the bills of the "Rushville bank" at par; the "Peoples Bank" at 94c. on the dollar; "The Stock Security Bank" at 88½c; and the "Bank of Rockford" at par.

The following banks viz: The "Southern Bank of Illinois," at Bellville; the "Du Page County Bank," the "Exchange Bank of H. A. Tucker & Co.," and the "Merchants' and Mechanics' Bank" of Chicago, have gone into voluntary liquidation, having security deposited with the auditor, with which to redeem their bills at par.

The following banks are in liquidation, viz: "Union Bank" of Chicago, the "City Bank" of Chicago, the "Mechanics' and Farmers' Bank, of Springfield, the "Farmers' Bank of Chicago, and the "Phoenix Bank" of Chicago, have been wound up, and the time within which to redeem their bills has expired by limitation of law. Any out-standing bills upon them are now, therefore worthless.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEADLININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forging of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES,
Of the late firm of Bridges & Bro.
JOEL C. LANE.

feb4tr

IRON BOILER FLUES

PASCAL IRON WORKS.

MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite lengths, as required.

WROUGHT IRON WELDED TUBES.
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,
PHILADELPHIA.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN & CO.,
no. 7 Wall st., N.

Feb. 7, '66-2m.]

CINCINNATI

LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20 MOORE & RICHARDSON.

MACKINAW CITY.

"If one were to point out on the map of North America, a site for a great central city in the lake region, it would be in the immediate vicinity of the Straits of Mackinaw. A city so located would have the control of the mineral trade, the fisheries, the furs, and the lumber of the entire north. It might become the metropolis of a great commercial empire. It would be the Venice of the lakes."—*Ferris' States and Territories of the Great West*, page 183.

"As the center of one of the richest mining regions in the world, as the northern terminus of one of the longest lines of railroad in our country, and the practical western termination of the great system of Canadian railroads now aiming at this crossing ground, as the natural harbor for a lake region whose commerce is already greatly increasing, Mackinaw possesses elements of growth and prosperity which can not fail to give it importance—an importance probably not behind the fifth lake city in the next twenty years."—*Railroad Record*.

"We have shown Mackinaw in geographical position to be equal to any point in the interior of America, and scarcely inferior to such points as Singapore, or Constantinople. * * * That the site of the town is remarkably good,—that it is healthy. * * * That it has more than the advantages of Cincinnati for manufactures. * * * That in the most important points of comparison, its position is superior to that of Chicago, a city which is the growth of only twenty years;—and finally, that by the grants of the Government already made, here will center a system of Railroads, unrivalled in their magnitude and importance. * * * On this site, so favored by so many concurring advantages, Mackinaw City has been laid, with broad streets, parks of native forest trees, and public grounds adapted to the wants and convenience of what we may reasonably anticipate, as a future city of rapid growth, of numerous population, of industrial arts, of extensive commerce,—presiding over those magnificent lakes—as the QUEEN OF THE NORTH."—*Edward D. Mansfield*.

The undersigned, Trustees for the Proprietors of the Lands of, and adjacent to "MACKINAW CITY," have the pleasure of presenting, for the consideration of capitalists, business men, and others, what they will concede to be, upon investigation, the most reliable point for investment and settlement, now available in the west or north.

Mackinaw evidently occupies the most commanding natural position for a city of the first class; surrounded as it is, by a widely extended territory, abounding in elements of the greatest wealth, affording the utmost encouragement to the manufacturer and mechanic in their widest diversity of employment, and without the possibility of a competing city in any direction nearer than Detroit on the south.

They feel, from what has been so truly said by E. D. Mansfield, Esq., a gentleman well and favorably known for his ability and habits of close investigation and comparison, that nothing more is left to be said, but to set forth the policy which they have adopted, and design to carry out, the more efficiently to promote the interests of this location, and at the same time to aid in the development of the vast resources of the surrounding region.

From the map it will be seen that streets are laid out eighty feet in width, and the avenues one hundred and one hundred fifty feet, respectively. In the deed of dedication of these to the public, provision is made for side walks, fifteen feet in width on each side, to be forever unobstructed by improvements of any kind, shade trees excepted, thus securing a spacious promenade, worthy of a place destined to become a principal resort for pleasure and health. Provision is also made for the proper use of the streets and avenues by Railroad Companies, adequate to the demands of the business of the city.

The lots, with the exception of those in fractional blocks, are fifty by one hundred and fifty feet, thus affording ample room for permanent, convenient, and ornamental improvements.

The Park now laid off, embraces the grounds of the Old "Fort Michilimackinac," sacred in the history of the country. These grounds, now in their natural condition, are unequalled for beauty of surface, location,

scenery, soil, trees, etc., by any Park in any city in this country; and when the skillful hand of the horticulturist has marked its outline and threaded it with avenues and foot paths, pruned its trees and carpeted its surface with green, it will present the very perfection of all that constitutes a Park delightful. The character of the soil,—it being a sandy loam, with sand and gravel underlying it,—renders it capable of the easiest and most economical improvement, securing walks always dry, hard and smooth.

This Park, with suitable blocks and lots for county and city buildings, market houses, schools, etc., will be duly appropriated to these uses, whenever the proper authorities are prepared to select suitable sites; and lots for churches and institutions of learning and charity will be freely donated to parties contemplating early improvement. Thus the Trustees propose to anticipate, by avoiding the errors of older cities, the wants of Mackinaw City in perpetuity, and free forever its citizens from taxation for any grounds required for the public good. They also design to place it in the power of the General Government to secure, by like donation, at an early day, the grounds necessary for such Fortifications as the wants of the country and commerce may require, on the simple condition of speedy improvement.* This liberal policy, it is believed, will best promote the true interests of the city and country, and at the same time be productive of the greatest pecuniary profit, both to the original proprietors, and to all others who may make investments at this point.

It is also within the purposes of the Trustees, to expend a large portion of their income from sales, in providing for the public wants, by the erection of Docks at the most important places, and by the establishment of Ferries, in view of which they have secured the land on the opposite side of the Straits. And they will also, as their means will justify, make loans to aid parties in the establishment of manufactures, etc.

Building materials of great variety and in abundance are at hand. Lumber can be had for mere cost of preparation, and the soil at no very distant point, is suitable for making bricks; while for immediate use, Milwaukee can furnish the articles of the best kind in any quantity. The shores of Lake Superior abound with exhaustless quantities of Granite, Sand Stone, and Marble; and Lime Stone and Sand are on the spot.

There are three harbors, the most eastern of which, is well known to navigators, as affording perfectly safe anchorage at all times; and when suitable docks are built, they will offer unusual advantages to commerce.

The surface of the city itself is unrivalled, having a natural grade suited to city wants, and the soil being a sandy loam with sand and gravel underlying it, will form the cheapest and best foundation for streets and avenues.

Evergreen and other trees of full growth now cover the grounds, affording a healthful and delightful shade, and capable of varied embellishment, without the delay incident to artificial growth. The grounds adjacent to the city are of the same character, gradually ascending until an elevation of seventy-five or a hundred feet is attained, affording the finest views of the Lakes and neighboring islands.

The following are the terms on which the Trustees propose to sell the property which they have subdivided into lots, as represented in the subjoined plat of the city. Notwithstanding the superior facilities of this point over hundreds of others in the west where lots have been readily disposed of at ten, twenty, thirty, and even fifty dollars per foot, the Trustees in order to give impetus to the growth of Mackinaw City, and to afford a margin for others to profit by, propose to all settlers who will immediately improve the property by the erection of mills, hotels, dwellings, manufacturing and printing establishments, docks, etc., etc., to donate the lots necessary for such purposes, subject to the choice of the parties themselves; and to those who desire to profit by the inevitable advance of property contiguous to their own improvements, the Trustees will sell lots on long time, if desired, at the unprecedented low price of five dollars per foot, front.

Capitalists and non-residents, desiring to avail themselves of the advantages of such a developing policy, and to invest upon a *real estate* basis, promising a rapid appreciation in value, can possess themselves for a very limited time, of lots, at the same low price of five dollars per foot.

The title to the property is unquestionable, having within five years, been derived directly from the United States Government, as will be seen by reference to a Title pamphlet issued by the undersigned for the information of parties interested.

Applications by letter will receive prompt attention. Asking a careful perusal of the annexed report on the subject, from the pen of E. D. Mansfield, Esq., (a copy of which will be sent to any party asking for it,) we submit the matter to the public investigation:

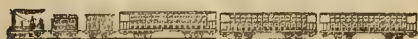
EDGAR CONCLING, } Trustees
A. M. SEARLES, }

CINCINNATI, Oct. 1857.

* Mackinaw Island being seven miles distant from the channel between the narrow points—is entirely unsuited to the purposes of fortification. The military position which commands the Straits, is necessarily that which is at the narrowest point, and that principle is adopted on the Delaware, Chesapeake and other Bays.

† To enterprising business men, Manufacturers, Mechanics, etc., who are unsettled by the present general financial revulsion and who think of finding a new home, suited to their enterprise and business, "MACKINAW CITY" with its natural advantages, and the easy terms now presented of acquiring property, probably offers greater inducements than any point either west or north.

INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

Chicago Express.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonsville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURG.

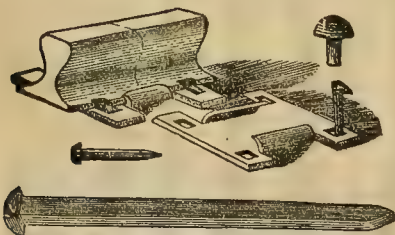
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

feb 28

CORBY, GOSSIN & Co.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, C.

GEO. D. WINCHELL & BRO., 172 Elm Street, bet. 4th and 5th, CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

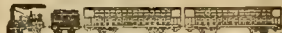
Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—1y

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jr 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO., RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-1y

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 298 H Street, Washington, D. C.

april 2

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,

Mechanical Engineer,

AND

AMERICAN AND FOREIGN PATENT AGENT, No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5-1y 10 Wall st., near Broadway, New York.

ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.
July 14, 1857. jy23-1m

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

oct29-6m

T. F. RANDOLPH & BRO. Mathematical Instrument Makers, Removed to No. 67 West 6th St. CINCINNATI, O.

Most Direct Route to the East.



BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE
Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

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And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

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Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

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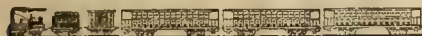
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Master of Transportation, Baltimore.

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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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1857. November 30. 1857.

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CLEVELAND,
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BUFFALO,
NIAGARA FALLS,

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FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

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This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

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Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

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ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

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Cincinnati, Hamilton & Dayton

[TRUNK LINE.]



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FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

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PITTSBURGH, INDIANAPOLIS,
PHILADELPHIA, TERRE HAUTE,
CLEVELAND, ST. LOUIS,
DUNKIRK, LAFAYETTE,
BUFFALO, LOGANSPOUT,
NIAGARA FALLS, CHICAGO,
NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sapper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

“STEAMER BAY CITY.”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects a Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia, arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS TRAIN** on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:15 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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PORTER, ROBE & SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

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Union Works, Baltimore.

POOLE & HUNT,

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PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

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WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

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STATIONERS, BOOKSELLERS,

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OFFICE:

N. W. Cor. Walnut & Sixth streets,
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SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

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generally, with the utmost promptness and despatch and in the best style.

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JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Aug 13

MCDANIEL & HORNER,

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MOTIVEAND CAR
SPRING

MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

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NORRIS BROTHER'S, Locomotive Builders, Philad.

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May 19.

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For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Ext nt

FOR THEIR

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EITHER SINGLE OR DOUBLE PLATE.
WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels, and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable rights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms.

Reliable Books for Travelers.

DINSMORE'S

R. R. GUIDE AND ROUTE BOOK

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TRICKS AND TRAPS OF NEW YORK CITY.

Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Punk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents—All sent free by mail. DINSMORE & CO., dec10 9 Spruce street, New York

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
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RAILROAD IRON.

1500 TONS best quality Welsh Rails, "Erie" pattern, 58 to 59 lbs. per lineal yard, now at New Orleans, for sale by

VOSE LIVINGSTON & CO
9 South William street, N. Y.

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:
THURSDAY MORNING, MARCH 4, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.
By WRIGHTSON & CO.

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WRIGHTSON & CO.,
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SANTA RITA SILVER MINING CO.—We would call the attention of our readers to the advertisement and circular of this company in another column. In their circular, the company show that they have mines of great value, that silver mining is a business which has yielded the most enormous profits under the most unskillful management, and that it affords a fine field for American enterprise and skill. There is no field now open, that offers such tempting inducements, as the new territory of Arizona. Its social and political condition, and its immense mineral resources, offer a prospect of remuneration to those who dare to be the pioneers, nowhere else offered.

LEXINGTON AND DANVILLE R. R.

A meeting of the friends of this road is proposed for the month of April or May next. It is hoped that railroad men generally, especially those interested in the great thoroughfares leading from Cincinnati to the north and east, will not fail to be here and examine the resources of this little link now struggling for completion. It will when finished to a connection with the Southern system, open a new era in our internal commerce.

THE NEW ERA OF RAILROADS; STATE AND PROSPECTS.

There is coming a new era in Railroads, which will be far better than any that has been, or for the last two or three years could have been anticipated. We have had the era of *ignorance and doubt*, when railroads could hardly find friends, or be made; and the era of *knowledge and hope*, when every thing was expected, and every thing inflated; and now we are to have the era of *experience and profit*. The suffering and hopeless, from late disasters, may not believe this; but, they are mistaken, and will soon find that if there is a dark, so there is a bright side to every question.

Hurrying on to make railroads, as if there was no other mode to wealth; locating many of them where they were not needed, and borrowing money at enormous discounts, it must follow, of course, that some portion of these roads will be comparatively valueless; and yet, we really think this will be the case with fewer, than could have been fairly supposed. Probably not more than one-tenth of all the railroads in the country will fail to pay a *moderate income*, and surely this is all that could have been hoped for. Three-fourths of the existent railroads have been subscribed to by their stockholders, more with a view to improve adjacent property and promote the interests of commerce, than with any idea of value to the stock, and undoubtedly every dollar of their cost *has been paid back to the people* in the only way which they originally anticipated.

Since the Little Miami Railroad was finished, the State of Ohio has increased in the value of its property, *four hundred millions of dollars*. Can it be doubted that a large part of this increase is due to the nearly 3,000 miles of railroad within its borders? The valuation of the city of New York has increased two hundred millions? Have not her merchants and bankers grown rich on the railroad system?

The United States has increased in wealth full a *thousand millions of dollars by railroads!* We say this advisedly. If the stockholders in some few of the roads have suffered seriously, it has been rather caused by their own rashness than by any necessity of the case. As we said, the era of rashness and false hopes is over. It will not come again, even if money were at 3 per cent.; because we have now a *valuable experience*, and this experience teaches, as it did in manufacturing, that some roads may be profitable, while others are not. It is not here, as some would have us to believe, that the majority of railroads do not *pay*. They do, and roads at very low rates of credit, like the *New York & Erie*, pay really a good dividend, but the *stockholders do not get it*. Why? Because the floating debts eat it up. But, this is not a fault of the working of the

road, *as a machine*; it is the fault of its financial managers, and these two, viz., the value of the road as a machine, and its financial embarrassments, must be kept separate, in order to ascertain the real utility of a road.

Looking into the *actual railroad profits*, we find these results:

1. The Railroads of Massachusetts and Connecticut have paid, *net*, from 5 to 6 per cent.; which, though not high, is still a good steady income.

2. The Railroads of New York have made more than 8 per cent., collectively.

3. The only Ohio Railroads, from which we have exact returns, have made 9 per cent. *net*.

Now, these facts prove, that the great body of well conditioned Railroads do *make profits*. But these profits have not gone to the stockholders, because there is a great floating debt to be paid off. But, is it not clear, that when that debt is paid off, these stocks will be among the most profitable in the country?

This we say, is *Railroad experience*. Then we have another experience, established to the great mortification, disgust, and loss of many railroad managers, that railroad companies can not borrow their capital, at enormous discounts, without becoming embarrassed, and losing their profits by the payment of interest.

We have, then, *two experiences* which will determine the future of railroad enterprises:

1. That railroads, in spite of all croaking, may be made *profitable*, both to the stockholders and the community, when they are located in proper places, and built with ready money, obtained at moderate rates.

This experience and the actual need of the new States, will lead to a more extensive, less costly, and more profitable system of railroads. Soon we shall have Kansas, Nebraska and Minnesota added to the Union. These will make thirty-four States, and contain about 2,000,000 square miles. At a ratio much less than that of the present railroads of Ohio, there will be *needed*, at least, 60,000 miles of railroad in all, of which the great Pacific will be a part. There are now finished, or nearly so, about 27,000 miles. There will then be 33,000 miles to make and the whole will probably be made in the next thirteen years—that is, by 1870. They will, probably, be distributed:

In Virginia.....	1,000 miles.
In Kentucky and Tennessee.....	2,000 "
In Ohio and Indiana.....	1,000 "
In Illinois and Missouri.....	1,000 "
In Michigan and Wisconsin.....	2,000 "
In Iowa and Minnesota.....	4,000 "
In Kansas.....	3,000 "
In Nebraska.....	3,000 "
In Arkansas.....	2,000 "
In Louisiana.....	1,000 "
In Texas.....	3,000 "
In California and all other States.....	10,000 "

That this may easily be done, we give the following results of the last thirteen years:

In 1844.....	4,311 miles.
In 1847.....	5,336 "
In 1850.....	7,355 "
In 1854.....	16,048 "
In 1857.....	24,195 "

In seven years, there have been built *seven-teen thousand miles* of railroad; and it would be far easier to make that number in seven years to come. Taking, therefore, a fair survey of the wants of the country, and the means at its command, we believe there is a fair prospect of a new era in Railroad progress—one equally rapid, but wiser and more profitable.

To this view, it may be said, that financial difficulties will intervene. In our opinion—*not so*. The time has only just now come, when the vast accumulation of gold begins to take its legitimate hold on the money market. While there was any vacuum to supply, (like water falling on a parched ground), it did not seem to take effect. But, the vacuum is filled, and the gold begins to overflow in the reservoirs. India, and China, and Russia have had their supply; and now capital is seeking investment all over Europe and America. We think money will *soon be lower than it was ever known to be*. In that case, it will be easy to make Railroads; for the dividends they will soon make, will appear large in the eyes of capitalists. The process of revival will, at first, be slow, but will come, and all proper enterprises be easy to accomplish.

MARIETTA AND CINCINNATI R. R. CO.

In our issue before the last, we published the financial scheme of the committee of stock and bondholders and directors of this road. In another column will be found the card of one of the gentlemen whose names were attached to the report. We have refrained from making any comments on this scheme, in the expectation of seeing a published statement of the condition of the road, its cost, debt, liabilities and resources. It is understood that such a document was read to the meeting in Chillicothe, and was to have been published immediately. It is due to the public, as well as to the parties more directly interested, the stockholders and creditors of the road, and we trust it will not long be delayed. The withholding of information, such as such a report is supposed to contain, is one of the most fatal mistakes that company can make. Whatever is its real condition, it is better that the worst should be known, than that imagination should picture a thousand difficulties that do not exist.

We propose to examine this scheme very briefly, and see to whom the credit of the scheme belongs.

The first item proposes to abolish a considerable portion of floating debt, by paying some cash, and the balance in third mortgage bonds at par.

The second proposes that holders of the

floating debt shall have the privilege of taking third mortgage bonds at par, by paying one-fourth the face of the bond in cash—the balance in the liabilities of the company.

3d. The stockholders are to surrender one half their stock to the Directors, to be disposed of as they may deem best.

4. The holders of the special bonds shall take the first mortgage bonds at par.

5. Those who have loaned the company their individual notes, and hold first mortgage bonds as security, shall take them in payment at 80 per cent.

6 and 7. That the holders of the first and second mortgages, shall fund their coupons and shall take third mortgage bonds, at seventy-five per cent.

8. That the holders of domestic income and sterling bonds, shall surrender their coupons.

9. The construction of a railroad communication with the terminus of the Parkersburg railroad.

10. Aid from Baltimore.

11. Corporations holding stock, to surrender claims for interest.

12. Holders of floating debt, unwilling to accede to the above propositions, shall accept 25 per cent in full of all their claim.

This remarkable document is the production of a committee composed of five persons, representing the debts of the road, one person the stock, and thirteen persons representing the directors. The directors were evidently in the majority, and having the power, used it to protect their own interests. One feature, which will be very evident in the whole scheme, is the different values fixed upon different securities and different debts. For instance, the holders of the floating debt—a liability which is generally created upon the faith, that the company would pay it in full as a matter of honor, no security being asked, are set down at twenty-five cents on the dollar. These persons are generally an unfortunate class of trades people and mechanics, who are not sharp enough to require good security in dealing with bankrupt companies. While by No. 5, those who have loaned their individual notes to the company, taking first mortgage bonds as security, must take the bonds in payment at 80 per cent. This class of persons, is generally directors of the company, who are sharp enough to require the best security the company can give, for any advances of money or credit they may make for the road. They take their full pay in the best securities the resources of the road afford, at the low valuation of 80 per cent. Now here is a wide difference between the ultimate pay the two classes of creditors get.

Another remarkable feature that will be observed, is that the third mortgage bonds, which are really very undesirable security,

are generally put in at par—while the first mortgage bonds, which must be as safe as any security which can be made on the road, are put in at 80 per cent. It will be very difficult to see the justice of this distinction.

Another remarkable circumstance in this proposition is, that the company concedes the necessity of building a road down to the terminus of the Parkersburg Railroad. When the Record advocated the policy of allowing another company to build a road from the terminus of the Parkersburg road to the line of the Marietta Railroad, and thus save expense to this company, and distance to all its business, the Directors of the Marietta Co. almost to a man, instantly stopped their subscriptions to the Journal. They have now found a plan of their own, to make this connection.

We regret to feel ourselves compelled to make these strictures in the management of a road of such importance to our city as the Marietta line. But the whole course of the directory for the past two years, has evidently shown that they were determined to make this line subservient to the interests of Marietta, in preference to those of the stockholders. We mean by this no injustice to our neighbors of Marietta; but we do claim, that men in places of public trust, should look to public good—and every mile added unnecessarily to the length of this road, is just so much detracted from the public.

In conclusion, we beg leave to submit, that had the directors been represented by a single voice in this committee, as were all the other interests, we cannot but believe that a proposition of an entirely different character would have been submitted.

MICHIGAN CENTRAL RAILROAD.—The following is a comparative statement of the receipts of the Michigan Central R. R. during the month of January, 1858, and the corresponding month last year:

	1858.	1857.
Passengers.....	\$53,611 30	\$59,533 60
Freight.....	62,756 99	76,942 92
Miscellaneous.....	6,012 66	6,809 83
Total.....	\$122,480 95	\$143,336 35
Decrease, \$20,855 40.		

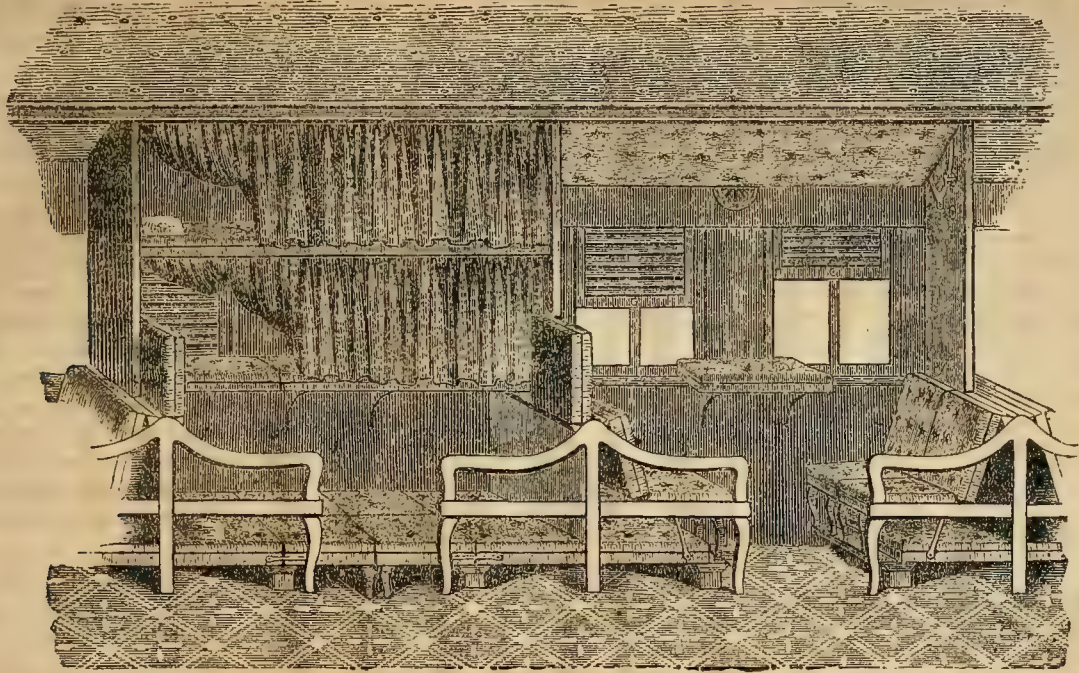
GREAT WESTERN RAILWAY.—The following is a comparative statement of the amount of traffic on the Great Western Railway for the week ending Feb. 12, 1858, and the corresponding week last year:

Passengers.....	\$13,928 64
Freight and Live Stock.....	16,164 85
Mails and Sundries.....	1,500 89
Total.....	\$31,594 39
Corresponding.....	45,269 50

PENNSYLVANIA RAILROAD.—The Pennsylvania Railroad is profiting by the favorable season, and the receipts are very large as compared with those of last winter. The gross receipts

For the month of January, 1858, were.....	\$335,384 12
Same month in 1857.....	258,880 43

Increase in January, 1858..... \$81,503 69



WOODRUFF'S PATENT SLEEPING CAR.

In company with numerous other gentlemen, we inspected Woodruff's Patent Sleeping Car, a view of the interior of which we give our readers. The greatest objection that has ever been urged against railroad traveling, has hitherto been its lack of the conveniences for comfortable rest. In speed and safety railroads are confessedly unparalleled. The iron horse traversing the country with the wings of the wind, and the might of the giant, has almost annihilated distance. Watchful care and vigilance, together with improvements in the roadway and rolling stock, has so reduced the risk of accident, that it is almost safer to travel than it is to sit still at home. Indeed the railroad has seemed to lack but one thing to make it a perfect means

of locomotion. That one want is now supplied by the application of the Patent couch, invented by T. T. Woodruff, Esq. A car fitted up with these conveniences in the day time, form an admirable saloon in which the passengers are grouped in forms around little tables, and having ample room. In the night time each set of seats is so arranged as to form three couches, one double and two single ones, thus accommodating with comfortable resting places, as many passengers as it will seat. The capacity of the car is fifty-six persons.

Whoever has tried the various contrivances in the shape of high backed seats, and low backed seats, and head rests, &c., during a night's journey, will readily appreciate the great advantage and comfort of the lying posture. One of these cars was run on the

Buffalo and Erie Railroad for some time, and so great was its popularity, although an extra charge of fifty cents per passenger was made for riding in it, that it was always full, and there were many instances of passengers laying over simply to secure a place in the "New Sleeping Car." We understand that the patentees propose to sell the right to use the above—either to the companies themselves or to private individuals, who will run the cars on the roads, and collecting the toll which will be cheerfully paid by enough of the travelers to fill the car.

The car was exhibited in this city by G. O. Dykeman, Esq., and O. F. Elliott, formerly of the Hudson River Railroad, New York.

This invention is well worth the attention of companies.

Correspondence of Railroad Record. St. Louis, March 3d., 1858.

Messrs Editors:—I was pleased on passing over the Ohio & Mississippi railroad a few days since, to find the track in such excellent order, and everything along the whole line evidencing a rapid and healthy improvement. This speaks well for the present able and energetic management, and gives evidence that the owners of the road will soon find their full account in placing their property in the hands of the present experienced Superintendent. Indeed, the road has already become one of the institutions of the country, and could in no way be dispensed with. Towns are springing up at every station like mushrooms; and farming lands in its vicinity, which a few years ago could not be sold at any price, are now in demand at very high rates.

It is curious to notice how like magic some of these towns have started into existence—several of them, not more than a year or two old, doing more business than many others less

fortunately situated, of a quarter of a century's growth.

That the Ohio & Mississippi—why can not its name be changed to "Cincinnati & St. Louis?"—will become at no distant day one of the best paying roads in the country, there can be little doubt. Situated as it is, between the two great cities of the Southwest—in the midst of a country of great and varied productiveness—with fine water connections at either end, running to all parts of the compass, and with scarcely a rival, it has all the elements to command the most complete and permanent success. When Missouri shall have completed her lines to the Iron mountains, to Kansas, to northern, western Missouri, &c.—there will be such a tide of business poured into this great thoroughfare, that a single track will be totally inadequate for its accommodation.

The most serious inconvenience the road now labors under is the crossing of the Mississippi, which at this season of the year, when the ice is running fearfully thick, is a matter of con-

siderable difficulty, still for the greater portion of the year, the admirable ferry and omnibus arrangements renders it but a matter of little consequence.

The company have built or fitted up at almost all the stations, comfortable station houses and freight depots, and in this respect compares favorably with any road of its age in the west. At this point they have recently erected a spacious freight house, which under the direction of general freight agent Lough, affords all desirable accommodations to St. Louis shippers.

Among the freight coming Westward, are large quantities of wheat from Indiana, for the use of the millers here, to be subsequently sent to New York in the form of flour. This seems curious—for if forwarded the same distance by rail Eastward, it would be 340 miles nearer New York! But the solution lies in the fact that St. Louis brands of flour are worth from fifty cents to one dollar more in New York than Ohio brands. But why is this? Simply, flour

manufactured from Southern wheat is, technically, *more thirsty*—that is, takes more water, and, consequently, yields a larger amount of bread than wheat grown at the North. St. Louis millers made their reputation years ago, from the fine wheat grown in this vicinity. This reputation has been carefully sustained, and now they can go more than half-way to Cincinnati and buy wheat from under the nose of your millers, bring it here and pass it through their well-appointed mills, and send it to New York and England at a profit, and what is equally important, always to a ready market. We have here a lesson to manufacturers, which they would do well to profit by.

In my next I shall have something to say about St. Louis, her manufactures, and her prospects. Yours, truly, D.

Railroads.

PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD.

The Annual Report of this Company for the year ending Nov. 30, 1857, was made to the Stockholders on January 11, 1858. At the date of its publication we were not favored with a copy, but published such extracts as we could find in our cotemporaries. We are indebted to the passenger agent of the road at Philadelphia for a copy of the Report, and find it one of great interest. This road is one of the well managed lines, and its Report always contains matters of interest. The present one, however, is unusually interesting, from the fact that it is the first report of a whole year's doings under the contract system, and will, therefore, be looked upon with interest by all our readers. We shall omit such items in the report as we had previously published. The Report gives the following exhibit of the earnings and expenses of the road:

REVENUE AND EXPENSE ACCOUNT FOR 1856 AND 1857 COMPARED.

RECEIPTS, Philadelphia, Wilmington and Baltimore Railroad, 1856.	
Passengers.....	\$745,714 99
Freight and Express.....	301,742 90
Rents.....	14,773 94
Mails and Miscellaneous.....	42,870 11
Total P. W. & B.....	\$1,105,101 94
RECEIPTS, New Castle Line.	
Passengers and Table.....	\$19,142 87
Freight.....	14,639 50
Rents and Miscellaneous.....	280 87
Total.....	34,063 24
Total of both lines, 1856.....	\$1,139,165 18
EXPENSES, Philadelphia, Wilmington and Baltimore R. R., 1856, including maintenance of way, interest, &c....	
.....	\$601,702 67
EXPENSES, New Castle Line, including tax and Bonus to State of Delaware.....	
.....	55,097 13
Appropriated to Renewals, P. W. & B. R. R.....	50,000 00
Appropriated to Renewals, N. C. & F. R. R.....	10,000 00
Total of Expenses and renewal of both Lines for 1856.....	\$716,799 80
Net Revenue of 1856.....	422,365 38
RECEIPTS, Phil., Wil. & Balt. R. R., 1857.	
Passengers.....	\$775,615 43
Freight and Express.....	284,371 19
Rents.....	16,018 62
Mails and Miscellaneous.....	43,905 84
Total, P. W. & B. R. R.....	\$1,119,910 98

RECEIPTS, New Castle Line.	
Passengers.....	\$15,337 14
Freight.....	7,964 09
Mail and Miscellaneous.....	640 48
Total.....	23,941 71
Total both Lines, 1857.....	\$1,143,852 69
EXPENSES, Phil., Wil. & Balt. R. R., 1857, including interest, maintenance of way, &c.....	
.....	\$621,608 43*
EXPENSES, New Castle Line, including tax and Bonus to State of Delaware.....	
.....	38,690 26
Appropriated to Renewals P. W. & B. R. R.....	50,000 00
Appropriated to Renewals N. C. & F. R. R.....	10,000 00
Total of Expenses and Renewal both Lines for 1857.....	\$720,498 79
Loss on Delaware R. R.....	44,418 31
	764,917 10
Net Revenue of 1857.....	\$ 373,935 59
Out of this two semi-annual dividends of 2 per cent. each have been paid, amounting to.....	\$224,000 00
Bills Payable Nov. 30, 1857.....	\$ 11,594 25
Consisting of Notes to Insurance Companies, subject to assessment in case of loss..	\$4,274 25
And notes due in 1859.....	7,320 00
Total.....	\$11,594 25
The value of Wood, Wood Lots and Materials on hand for future use, and paid for Nov. 30, 1857, was.....	\$97,163 49

All new work for the last year, excepting the completion of some old contracts during the first quarter for new cars, &c., made the year before, has been charged either to expenses or renewals. A large amount of items on new work usually charged to construction is embraced in last year's expense accounts. These items are all for substantial improvements and additions to the value of the road, and it may be considered as worth at least that amount more than it was at the time of the last Annual Report.

Amount of new work charged to expenses last three quarters of the year, \$51,520 07.

The balance of the net earnings, after paying dividends, has been appropriated to the payment of the floating debt, to the payment of certain Bonds and Mortgages, and to the increase of cars and engines, and the permanent improvement of the road.

Number of Miles run on the Philadelphia, Wilmington and Baltimore Railroad, 1857,	
By Passenger Trains.....	251,647
By Freight Trains.....	135,703
Miscellaneous.....	41,685
Total.....	429,035

Number of Miles run on New Castle and Wilmington, New Castle and Frenchtown and Delaware Railroads, 1857,	
By Passenger Trains.....	104,743
By Freight Trains.....	30,175
Miscellaneous.....	1,400
Total.....	136,318

Total Miles on all the Roads..... 565,353

It will be observed by the Treasurer's statement, that a part of the bonded debt of the Company, called improvement Bonds, 1st Series, amounting to \$144,000, becomes due on the 1st day of April, 1858. These must be provided for at maturity. The second Series of the same character of bonds, amounting to \$119,000, does not fall due till May 1, 1863.

* Made up in same way as heretofore this item would be for 1857, \$570,068 36; that is, there has been charged to the expenses of operating the Road \$51,520 07 not for repairs of work already existing, but for additional structures and entirely new work, such items have heretofore been charged to construction account. Construction account has been closed, and every thing is now charged to expenses.

LOCOMOTIVE ENGINES.

This part of our machinery has never been in so good order as at present. Two new engines have been added to our stock in the last year—one a wood burner and one a coal burner. We have now in daily use two coal burners on the Dimpfel plan. One, the Christianna, is an old wood burner altered; and the other, the Daniel Webster, a new engine built by Fairbanks, at Taunton. The first burns coal with entire success, but not so economically as the second. The second has run the great Express Train between Philadelphia and the Susquehanna River since early in April last, has made steam as freely, and worked in every respect as satisfactorily as our best wood burning engines. The following statistics show the comparative economy of wood and coal as a fuel for locomotives:

Number of miles run by engine Daniel Webster, coal burner, on Express Passenger train, from April 14th to November 30th, 1857, 22,699 miles.

Cost of Coal consumed.....\$1,441 91
" of Wood for kindling..... 132 49

Total cost of Fuel.....\$1,574 40
Cost of Fuel per mile run, 6 96-100 cents.

Engine America, (wood burner,) on same train, ran, from April 1, 1856, to March 31, 1857, 29,486 miles.

Cost of Wood consumed, \$3,948 75.
Cost of Wood per mile run, 13 39-100 cents.

Engine Christianna, (coal burner,) ran from Dec. 1, 1856, to Nov. 30, 1857, 13,800 miles.

Cost of Coal consumed.....\$1,014 30
" of Wood for kindling..... 163 06

Total cost of Fuel.....\$1,178 36
Cost of Fuel per mile run, 8 54-100 cents

Average cost of Wood on Tender \$3.85 per cord.
" of Coal " 5,00 per ton.

The cost of doing the same work with a wood burning engine as that done by the Christianna, has been about 11 cents per mile run, the train being an accommodation train and a lighter one than that run by the engine America.

It will be seen from the foregoing that the saving in fuel made by the Webster is nearly fifty per cent. The other coal burner, being an old machine altered, is not so well adapted to its work, and has saved only about twenty-eight per cent. as compared with wood. The repairs of the Webster, have been small, not greater than those of a wood burner of the same character per mile run. Those of the other coal burner have been about the same as the average of ordinary wood-burning engines. Neither engine has shown more depreciation than that of a wood burner. This experiment in coal burning has been, therefore, an entirely successful one, and promises much for the future in reducing the heaviest item of railroad expenses.

THE CONTRACT SYSTEM.

This system, which promised so much at the time of the last Annual Report, has continued to answer all our expectations, so well that on the first of August last, the termination of the old contract, a new one was executed with the same party, Messrs. A. J. Barrett, George Stearns, Jr., Wm. Stearns, and H. F. Kenney for the same service as for last

year, and for several other branches. A contract has also been made with Mr. T. W. Bowers for the repairs of all cars, and for furnishing all oil, waste and fuel for all the stations and cars, as well as for some other items of service. Several other smaller contracts on the Main Line and on the Delaware Road, have also been made with other parties; so that now nearly all the service excepting repairs of bridges, that of the Treasury Department, and that of the Conductors and the Supervising offices, is performed by contract, instead of fixed salaries. Nothing can more effectually secure promptness, energy, and thoroughness, than this system properly carried out in the hands of faithful contractors. Every thing, however, depends upon the selection of capable, honest and efficient men. A selection of incompetent and improper men would be fatal. Too great a subdivision of the work by contract among too many disconnected parties might also work to great disadvantage. If the party having the roadway has no interest in the locomotive or car department, he may suffer the road to get out of repair, and thus save money for himself at the expense of the Cars and Engines—but if he is also interested in the machinery as well as the road, he can not allow the road to depreciate without increasing his machinery expenses, and vice versa. A community of interest to a considerable extent is, therefore, necessary. A want of this has led to the abandonment of the contract system in some parts of Europe as a failure; when had it been fully and properly tried, it would have resulted in entire success. Our trains have never been run with so much regularity, and our road, cars and engines have never been in so good order as now. We do not mean to say that this state of things could not have been brought about under the old system—but we are certain that it could not have been accomplished so cheaply and so easily as under the contract system. Under proper restrictions, it will be one of the important means to work out a radical improvement in the value of railroad property. Public works rarely succeed under the management of State Governments, from a want of individual responsibility and pecuniary interest in the success of the work. Private corporations succeed generally better than State governments in the management of public works, because individual care and interest can be better called into action—but even here that keen vigilance in all departments, and particularly in the expenditure of money, which is the true element of success in private business, can rarely be attained. If all the employees of a corporation could be made pecuniarily interested in its economical and safe management, its success would be more certain, extravagant expenditures would be avoided, and accidents would be much more rare. A proper contract system secures

all these important objects, when faithfully carried out by competent men.

REPORT OF THE CHIEF ENGINEER OF THE M. & C. RAILROAD COMPANY.

MARIETTA O., FEBRUARY 1, 1858.

NOAH L. WILSON, Esq.,

President M. & C. R. R. Company, Chillicothe, O.

Sir:—I beg leave to submit the following Report of the condition of the work on Division No. 6, between Athens and Marietta—being the portion of the Road of which I have had charge.

The track-laying on this Division was completed on the 9th April last, and upon the 20th April trains began to run through to Harmar, regularly.

The unfinished work on this Division, comprises the Athens Tunnel, and Section No. 1, connected therewith; the Pilcher Tunnel; the Napier Tunnel; the Bridges, or Vandewarker Tunnel, and west approach; the Trestling through Harmar, and the Muskingum River Bridge.

A temporary line was built around the Athens Tunnel in the fall of 1856, and the work upon the Tunnel and Section was suspended by agreement with the Contractors. At the time of suspending, the approaches were nearly out, and the contractors ready to commence tunneling. This Tunnel will be 650 feet long.

The estimated cost of completing this job is... \$35,695.90
Value of work done prior to suspending..... 53,200.74

Making total cost of..... \$88,896.64

The temporary line which has been constructed around this Tunnel, affords so good a substitute for it, that there is no pressing necessity for its construction.

The Pilcher Tunnel is upon Section No. 8. This Tunnel will be 1,660 feet long, the whole of which will probably require to be supported by timbering, or arching. The former has been adopted in all our Tunnels, because of its cheapness. This Tunnel was commenced at the west end, and 345 feet has been completed and timbered, and the bottom part of the Tunnel driven 101 feet further in, making 446 feet, the hill has been penetrated, and leaving 1,214 feet yet to be taken out. The contractors were just ready to commence tunneling at the east end when they suspended.

The track is now carried over this Tunnel by a temporary line, with the grades of 200 feet per mile, on each side the summit of the hill. Although this line can be worked by locomotive power, it is a very serious impediment to the passage of a large freight business over the road, which ought to be obviated at the earliest possible day, by the completion of the Tunnel.

The estimated cost of completing this Tunnel, is..... \$45,491.15
Value of work done prior to suspension, is..... 93,819.67

Making total cost of Section..... \$139,310.82

The Napier Tunnel is upon Section No. 23, about one and a half miles east of Little Hocking Creek. A temporary line is constructed around this Tunnel, which affords so good a substitute for it, that there is no pressing or immediate necessity for its construction. The approaches are far advanced toward completion, but the Tunnel has not been put under contract. It is designed to be 650 feet long, and will cost about \$30,000.

The Bridges, or Vandewarker Tunnel, is about three miles west of the Ohio River at Scott's Landing. On the western approach

to this Tunnel, which is a heavy job of rock excavation, so situated that but a limited force can be employed upon it, there yet remains work to be done, the estimated cost of which is \$15,000, which will require as long time to do as the Tunnel.

This Tunnel will be 1,430 feet, and will all require to be timbered. It was commenced at the east end, 518 feet has there been completed and timbered. The western approach not being out, in order to expedite the work a shaft was sunk about 400 feet from the west end, through which 212 ft. of Tunnel has been excavated and timbered; making 730 feet in all finished, and leaving 700 feet yet to be done.

Estimated cost of completing Tunnel..... \$32,273.47
Estimated cost of completing approach..... 15,000.00

Total to complete..... 47,273.47
Value of work done on Tunnel prior to suspension..... 81,685.37
Value of work done on approach prior to suspension..... 22,814.66 104,500.03

Total cost of Tunnel and approaches..... 151,773.50

The track is now carried over this tunnel by a temporary line, with grades of 200 feet per mile, on the west side of the hill, and having four Ys or reverses on the east side. The delay, inconvenience, and increased expense of doing the business of the road over this Y line, is very great. There is an absolute necessity for the completion of this and the Pilcher Tunnel at the earliest possible day, in order to successfully or economically do any considerable amount of freight-ing over the road to the Ohio River.

The next unfinished and suspended job is the trestling through Harmar, and the Muskingum river bridge. The principal part of the trestle timber has been delivered and framed, and about one third of it raised. The estimated cost of completing this trestling is \$3,507.28.

The bridge, abutments, and piers, are completed, and the drawbridge is raised and nearly completed. The timber for the main bridge is delivered and chiefly framed, and now lies going to decay in the streets of Harmar and Marietta.

Estimated cost of completing the bridge,.... \$18,409.30
Estimated cost of completing Roadways at end 4,839.40

Making, to complete,..... 23,248.70
Amount of work prior to suspension,..... 89,926.03

Making total cost of bridge,..... \$113,174.73

There would seem to be an urgent necessity for the completion of this bridge, not only to carry the Railroad really into Marietta, but to save the materials now on hand from total loss. This bridge is designed for use as a highway as well as railway purposes, and by their charter the company has a right to collect tolls for its use. There can be no doubt the revenue from these tolls on the road-bridge would pay the interest on the cost of the entire structure. Another important reason for the completion of this bridge is, that the Railroad has thus far failed to command any considerable portion of the Muskingum river and Marietta business, on account of the difficulty and expense attending the transfer of freight and passengers from the present terminus of the road to Marietta.

Besides the jobs named, there are also a number of places on this division where temporary grades and side-lines have been made, to save time and expense in opening the road, which can be operated so well, that for the present they are regarded as permanent lines. I have made no estimate of the cost of reconstructing these on the original loca-

tion; neither have I made any estimate of the cost of filling, replacing, or substituting other structures for any of the trestles on the division. I have only included the tunnels, and those works necessary to the successful use of the road for the present.

The amount required to complete the several jobs named will be as follows, viz:

To complete the Athens tunnel and section,	\$35,695 90
To complete the Pitcher tunnel,	45,491 15
To complete the Napier tunnel,	30,000 00
To complete the Bridge's tunnel, and approach,	47,273 47
To complete the Harmer trestle,	3,507 28
To complete the Muskingum Bridge and Roadways,	23,248 70
Total,	\$185,216 50

From which may be deducted \$65,695 90, as the estimated cost of completing the Athens and Napier Tunnels, which are not necessary to the successful operation of the road.

These works would be a great improvement on the present temporary lines; but their construction can be postponed until the finances of the company will justify it.

The experience of the last season has demonstrated clearly the necessity of a connection with the Baltimore and Ohio Railroad by rail. To make this connection, four plans have been proposed, viz:

1st. The construction of the Independence Railroad from Williamsport, opposite Marietta, to a point some thirty-seven miles east of Parkersburg, on the North Western Virginia Railroad.

2d. The construction of a road from near Warren's station on the Marietta and Cincinnati Railroad to Parkersburg by way of the Hocking Valley.

3d. The construction of a branch road from the east end of Napier Tunnel, some three miles west of Vincent's Station, direct to Parkersburg.

4th. The construction of a branch or connecting line from a point at or near Scott's landing station, down the Ohio River Valley to Parkersburg.

In view of the fact that the construction of either of the three first named connecting roads, would require from one and a half to two years time; it has been thought best to make a connection by the latter route—on which a road can be built in from three to four months. I was therefore instructed to locate a branch road by the fourth named route from near Scott's Landing to Belpre opposite Parkersburg, which was done in August last.

The route adopted, after a thorough examination, as the cheapest and best, diverges from the main line on what is known as the Skipton farm about three-fourths of a mile west of Scott's Landing Station. Leaving the main line by a curve of 955 feet radius to the right for 500 feet, the line is then adjusted to the ground on the west side of the valley of Chaplin's Creek to Station 25 plus 62 feet. At this point which is on the land of James Reppert, a curve to the right of $6\frac{1}{4}$ degrees per station, radius nine hundred and seventeen feet, is introduced to get around the point of the river hill and into the Ohio Valley. This is the shortest radius curve on the branch, and makes a change in direction of 111 degrees. From the end of this curve the line follows up the west side of Reppert's creek about 1000 feet, where a curve eastward 450 feet long with radius of 2865 feet is introduced, from which a tangent is continued across the "Plain" or second bottom, crossing the farms of C. Holdren, Charles Dickey and others, at such place as will do them the

least amount of injury. At station 90 another eastward curve is made for 1250 feet with radius of 3820 feet; when a tangent is taken of proper direction to carry the line from the upper to the lower plain or river bottom, descending forty feet at the rate of 52.80 feet per mile, through a small ravine terminating at the cross-roads near Mr. Thomas Bailey's house. The greater part of this plain, or second bottom, over which the route passes, for near a mile, is composed of gravel, covered with earth at the upper end, but which as you go southward comes out to the surface. The descending tangent, which is 2450 feet long, passes through, and along side of an excellent bank of gravel for ballasting, being quite free from any mixture of earth or clay. Having the use of the gravel for ballasting in view, I have so located the branch road as to afford the most favorable opportunity for working sidings into it. A face or depth of 16 to 25 feet of pure gravel can be obtained, making it a very good place to work a steam shovel.

This gravel will be invaluable to the Company for ballasting the main road, on which no gravel is found east of Athens. After the Bridges tunnel is completed and the Y line over it obviated, I see nothing to prevent ballasting the road from this gravel for twenty miles west of the river, at least, and east to Marietta, besides ballasting completely the branch itself.

From Thomas Bailey's, the route passes over the highest land in the river bottom, passing 150 feet west of Henry Deming's house, and comes to the base of the river bluff near the residence of Mr. Burgess. From this place it follows at and near the base of the hill across the lands of Wm. P. Cutler and Henry Cole to near Mr. Briggs' residence where the only "narrows" on the route are encountered. The river here comes close to the base of the hill for about a quarter of a mile, but the slope is so gentle, there is no difficulty in getting a good and cheap line along it. The country road will here have to be changed for a short distance, but it can be kept between the railroad and river without difficulty. There are indications of a tendency to slides in this hill-side, but by arranging the grades so as to require little or no cutting through it, I do not anticipate any trouble from that cause.

At McLure's store, the lower end of the narrows, a curve is made to west 560 feet long, with radius of 3820 feet; from which a tangent is made, over a mile in length, of proper direction to cross Crooked Creek Valley at what is known as the "neck," which is the only proper place to cross it. This tangent passes over the lands of Wm. P. Cole, Frederick Lewis, and others, west of their buildings, in such a manner as to do as little damage as possible, and as satisfactory to them as any line would be.

After crossing Crooked Creek by trestle 350 feet long and 25 feet high, the line passes west of the residence of the Misses Lewis some 150 feet, and again comes to the base of the river hill on Mr. Barclay's farm, west of his house. It then follows the base of the hill to Mrs. O'Neil's house, passing 35 feet in front of it, near the mouth of Congress Creek. This stream has a valley which requires a trestle 650 feet long, and extreme height of 35 feet. After crossing the Creek the route is upon the Belpre plain, and on and along the Ohio river bank, on the lands of Francis Stone, Mr. O'Neil, Mr. Browning, and others, between their buildings and the

river, to Henderson's ferry, opposite Parkersburg, Va., making a total distance of 9.84 miles.

At and adjoining the terminus there is a plain affording every required facility for sidings, and for connecting with the river in any manner that may be selected. The distance from the end of the branch across the Ohio river to the Parkersburg depot, is 1667 feet. The river proper is one-fourth of a mile wide, and quite deep at all stages of water, making it a very suitable place for a steam ferry boat.

Although this branch is intended only to connect the Marietta with the North-Western Virginia Railroad at Parkersburg, temporarily, till some more direct connection can be obtained, yet in view of the possible contingency that it may be continued as a permanent road, connecting Parkersburg with Marietta, and the Muskingum Valley—for which, when the road shall be completed to Wheeling, there will be strong reasons—I have endeavored to locate it upon the best ground and in the proper place for a permanent road. All the grades of the line are above the grade of the tracks in the Parkersburg depot.

I estimate the total cost of grading, culverts, cattle guards, etc., to be \$31,523 33, making an average cost per mile of but \$3,203 59. This does not include the superstructure or right of way, but is believed to be ample for every thing else.

There should be added to this the cost of cross-ties, chains, spikes and tracklaying, which exclusive of the rails, I estimate at \$1400 per mile.

There should also be sidings provided at Belpre, and at one or two other places on the line. I propose to provide for 1.66 miles of side tracks in the first place, which, with 9.84 miles of main track, will make $11\frac{1}{2}$ miles of rails to be provided, which, at $105\frac{1}{2}$ tons net per mile (60 lb. rail), will require 1213 tons.

The amount of money required to build the branch, aside from rails, will be as follows, viz:

Grading, etc., etc., etc.	\$31 523 33
Eleven and a half miles of superstructure, exclusive of rails, at \$1400 per mile,	16,100 00
Total exclusive of rails,	\$47,623 33
To which add for 1213 tons of rails, at \$70 delivered,	84,910 00
Total cost,	\$132,533 33

Making the average cost per mile, exclusive of the right of way, \$13,468 83. The right of way will cost from five to ten thousand dollars.

All of which is respectfully submitted,
H. C. MOORE, Chief Engineer.

THE FINANCIAL SCHEME OF THE CINCINNATI AND MARIETTA R. R. CO.

EDITORS GAZETTE:—In your paper of this morning you state that the committee appointed at the late meeting of those interested in the Marietta and Cincinnati Railroad, held at Chillicothe on the 10th inst., reported in favor of the financial scheme recommended by the Directors. This statement is likely to mislead. The scheme recommended by the Directors made its appearance to the large body of those interested, on the day the meeting was held. So far as I am aware, no one except the Directors knew of it until the day before; and even on the day of the meeting, but very few of the reports were in circulation. The Committee appointed at that meeting met on the evening of the 10th inst., at Chillicothe.

The whole committee were not present, (some three or four being absent) nor were those present unanimous in recommending this scheme. As one of that committee I opposed it, unless somewhat modified, and refused to sign a recommendation of it, it being in my opinion, unjust to a large portion of the creditors of the Company, who have lately furnished them with locomotives, cars, &c. It is quite evident that at the time the committee met, there had not been a sufficient time, for any one who had not previously examined this scheme to come to a final determination in reference to its merits, or to present a substitute. I believe, that with a little time to perfect it, a better plan can be devised for relieving the Company from its present difficulties.

I write this that the public may not suppose that the committee were unanimous in recommending this scheme. I have no personal interest in the road, and attended the meeting only as representing a large amount of the floating debt.

T. D. LINCOLN.

CINCINNATI, Feb. 15th, 1858,

SOUTHERN PACIFIC RAILROAD.—The stock of the Southern Pacific Railroad, standing in the name of subscribers who have omitted to pay up their instalments, was sold yesterday at auction for account of those subscribers. It was mostly purchased by those who have taken a large interest in the road, and can be redeemed at any time within 30 days. In a recent decision given by one of our courts in the case of the Mississippi Sound Company, all those who have subscribed to public corporations of this nature are bound to pay up—that is, if they have anything to pay with. There will be no chance of getting clear in the case of the Railroad on the part of those who have placed their names to the rolls of subscription. The number of shares sold yesterday on account of delinquent subscribers was thirty thousand. It is hardly necessary for us to add the charter of the Company, granted with the immense and profitable privileges by the State of Texas have been saved and confirmed by the completion of the first 20 miles of the road, which secures the grants of land. So far as the matter now stands, the immense privileges of lands are secured, and the success of the road placed beyond a doubt. Two hundred and seventy miles of the road are now under contract, and to estimate the advantages of this road would require more space than we can appropriate. It is really Southern in its character. The management is now out of the control of the New York jobbers and speculators.—*New Orleans Crescent.*

DAYTON AND MICHIGAN RAILWAY.—The iron on the section of this railway between Sidney and Lima, a distance of 32 miles, is all down but about three miles, and the work on this unfinished portion is going steadily forward and this division will soon be ready for the cars. The distance from Dayton to Lima by this line is 70 miles, which is just one half of the entire distance from Dayton to Toledo. The remaining 70 miles between Lima and Toledo, are graded and bridged, and the ties are ready, so that the laying of the rail, which is expected to be down before the year closes will complete this important work.

By the 1st of April, express trains will run from Cincinnati to Lima, there connecting with the Pittsburgh, Ft. Wayne and Chicago line. At present passengers go through from

Cincinnati to Sidney without change of cars, where close connections are made over the Bellefontaine and Indiana Railway, with Cleveland, Buffalo, Pittsburgh, Philadelphia, and New York.—*Dayton Journal.*

SUBSTITUTE FOR PAPER.—Mr. Barry, the manufacturer of new paper, or substitute for paper, from animal substances, was prosecuted by the Crown for not having taken out a paper maker's license, and for not submitting his works to the usual discipline of the excise. The defendant contends that the article in question, being manufactured from hides, is parchment, and not paper, which notion the revenue officers dispute. Parchment pays no duty; paper, as our readers know to their cost, is subject to heavy impost. The new material so much resembles parchment, that Mr. Gowan, M. P. for Saunders an inspector of inland revenue, and other equally good judges cannot discover the difference, without wetting it and applying other tests. Mr. Baron Bramwell expressed an opinion, subject some doubt, that the article, being in the nature of paper, was paper within the meaning of the act and directed the jury to find a verdict for the Crown, with leave to defendant to move to enter a verdict, and, with power to the Court above to order a new trial, if they should think that there was any question all to go to the jury. Verdict for the Crown was accordingly given for £100.—*Manchester (England) Examiner.*

STANDARD OF MEASURES.—It is necessary, in all countries where commerce is in any way encouraged, that some standard of measure, and weight should be adopted. In this country and Great Britain the yard is the standard of measure, the length of which is determined by the vibration of the seconds pendulum at London in a vacuum at the level of the sea; but as the length of the pendulum varies in different latitudes, the yard is a little longer in New York than London, because of the pendulum in the former place being about the one-eighth of an inch longer than in the latter. This yard is divided into thirty-six inches, or three feet. The old method of teaching the tables of measure was very vague, as it commenced with the statement that "three barleycorns make one inch," which, to say the best, was a remarkably uncertain method of fixing a standard, as barleycorns are very liable to differ considerably in size.

The French on the other hand, take a quarter of the earth's circumference, and dividing that into ten million parts, take one of them, which is equal to 39,371 standard inches and, calling it a metre, from all their weights and measures. As the circumference of the earth is not likely to vary much with time or temperature, and cannot meet with the accident which befel the standard British yard, which was melted in the old Houses of Parliament when they were burned, it is decidedly the most accurate, but so long as we have some given and known standard, it does not much matter what it is.—*Wash Union.*

EASTERN TEXAS R. R.—The Marshall *Republican* makes mention of the Henderson and Mexican Gulf Railroad, now re-chartered under the name of the Eastern Texas Railroad. It is to run from Pine Island Bayou, near Sabine Pass to Henderson, and is said to be in the hands of men who will build it without fail.

LOST BAGGAGE—IMPORTANT DECISION.

The following important decision was rendered in the Superior Court at its late session:

Thornton Cheek vs. The Little Miami Railroad Co. Judge Spencer delivered an opinion in this—an action to recover the value of property taken out of a trunk. The plaintiff bought a through ticket at Washington, for Cincinnati. He got here in due time and inquired for his trunk; it was not to be found; but in about fourteen days, upon presenting his check at the depot of the L. M. R. Co., in Cincinnati, it was produced to him, having previously been broken open and rifled of a portion of its contents, to wit: about \$170 worth of clothing and \$75 in money. He claims this was lost through the negligence of defendants, and seeks to recover a judgment for the amount, as well as for damages he sustained in losing a situation, occasioned, as he alleges, by the delay.

On the part of the defense, it was admitted that the trunk had the appearance of being broken open when delivered to the plaintiff, but alleged that it was in that condition when it arrived at the depot, but they denied its delivery by the plaintiff to any agent of defendants at Washington, authorized to contract on their behalf—there being several intervening lines owned by independent companies.

It was remarked by Judge Spencer, that it had been heretofore decided by the Court, that a Railroad Co., might make a contract for transportation outside of its own terminus; and the question now to be determined was, with whom did the plaintiff make his contract? When a party contracts with an agent for transportation over the entire line, pays an entire price and receives a through ticket, does he understand he is making payment for an entire consideration, or several distinct considerations? Or do the proprietors of these several lines hold themselves out as dealing severally, or uniting in a common purpose for an entire consideration? The answer must determine the question of liability. It is evident, so far as the plaintiff is concerned, that he must have considered the contract of transportation as entire—either as such with the Company at the starting point of the line, or as made with all the persons composing the line; that he considers the contract as a unit, and not as made up of several agreements with several distinct parties. The evidence he receives from the other contracting parties is of an entire engagement, and not of several distinct liabilities. His baggage is checked through the entire distance, to be delivered safely at its journey's end, and is not to be received by him at any intermediate point. If his ticket should be refused at any intermediate point, he does not expect to recover back the consideration money paid for that particular part of the route, but regards the whole contract as broken. It follows, then, that he treats the contract as entire. If no partnership, in fact, exist between the roads, he may, undoubtedly, treat the contract as entire or several. So far as the other parties are concerned, by the appointment of a common agent to receive the entire consideration, when they issue through tickets and checks which they recognize and approve, they are made aware of the expectation of those dealing with the agent, and must know the contract would be treated as entire, and not several.

Undoubtedly, if the agent at the starting point failed to disclose his principals, and to contract on their behalf, whether jointly or severally, he, or the Company represented by him, may be treated as sole principal and held liable. But, if the contract made by him is entire, and he is in fact dealing for others who receive the benefit of the contract, the other contracting party may look to the real principals, and subject all who are interested in the joint contract.

In this view of the case, he (Judge Spencer) was of opinion that in the present action the contract of transportation might properly be considered as joint between all the roads participating in its benefits, and that defendants were liable accordingly.

Assuming, however, that the facts above referred to fail to establish a joint liability between the parties forming the line, it seems to the Court the question on another point is in favor of plaintiff. It was in proof that the trunk containing the baggage was delivered in good order in the cars at Washington, with a through check fastened on it—that it came into the hands of defendants, and was transported over their line of road—that the check was recognized by defendants as authorizing them to carry the trunk through. The delivery of a check to the plaintiff was intended to relieve him from the superintendence of his baggage, and devolved such care on the agents of the several roads. It is found in the defendant's hands broken open and rifled. The nature of the case renders it difficult or impossible for plaintiff to show where the loss happened; and it seemed to the Court, therefore, that the burden of proof on that point should rest with defendants—that they in whose possession it was first found injured, should either account for such injury or show it happened else where, and in default of such account, must answer for the loss. As to the amount, the plaintiff was entitled to recover for a certain amount of wearing apparel, and traveling expenses deposited in his trunk, and the sum claimed was not unreasonable. He was not entitled to recover for any damages sustained in consequence of losing a situation which was not the direct result of a failure to deliver the trunk.

W. P. Probasco for plaintiff. T. Wright for defense.

MONETARY AND COMMERCIAL.

Wednesday, P. M.—Owing to preparations for the payments falling due on the 4th, there has been a somewhat increased demand for money for a few days, consequently currency is reported in limited supply, and the market a little stringent. This will, however, last but a day or two. The discount houses are doing nearly all the first class paper offered by their customers at 10 and 12 per cent., and good names sell in the street at 12 and 15.

Eastern exchange is bought at $\frac{1}{4}$ and $\frac{1}{2}$, and is sold at $\frac{1}{2}$ to 1 prem. New Orleans is dull at par to $\frac{1}{2}$ prem.

E. F. Satterthwait in his Circular, dated London, Feb. 12, says there has been a buoyant market in American securities during the past week. Illinois Central Bonds have advanced to 86 $\frac{1}{2}$. Erie bonds, of all classes, have been in demand at higher rates. New York Central shares have advanced to 2 per cent. Illinois Central shares have slightly receded in price.

Relative to Railroad securities in the New York Market, the Courier and Enquirer says:

The principal movement was in Railroad securities. New York Central opened at 93 $\frac{1}{2}$, an advance of 5 $\frac{1}{2}$, and closed at 93, with sales of over 4800 shares. Erie opened at 36, an advance of 3, and closed at 37 $\frac{1}{2}$, with sales of 6,500 shares. Hudson River opened at 35, an advance of 2 $\frac{1}{2}$, closed at 37, with sales of 2,500 shares. Harlem opened at 16 $\frac{1}{2}$, an advance of 1, and closed at 16, with sales of 3000 shares. The preferred stock improved 1; Michigan Central sold at 74 $\frac{1}{2}$, an advance of 4 $\frac{1}{2}$ over the last sales. Reading sold 2100 shares, opening at 65c, an advance of 2 $\frac{1}{2}$ and closing at 64 $\frac{1}{2}$. Michigan Southern opened at 32 $\frac{1}{2}$, and closed at 33 $\frac{1}{2}$, an advance over Saturday's sales of 6, with sales of 2500 shares. Preferred stock improved the same. Cleveland and Toledo advanced 2, Panama 1 $\frac{1}{2}$, closing at 107. Illinois Central closed at par, an advance 1 $\frac{1}{2}$; Chicago and Rock Island advanced 4 $\frac{1}{2}$; Milwaukee and Mississippi 3 $\frac{1}{2}$; Galena and Chicago 2 $\frac{1}{2}$; La Crosse 1 $\frac{1}{2}$; Delaware and Hudson 1 $\frac{1}{2}$; Cumberland Coal Company 2 $\frac{1}{2}$; Pennsylvania Coal Co. 1 $\frac{1}{2}$ over last sales.

The Indiana Central in their report, say:
The amount of the general construction account is \$1,666,280.24; equipments, \$244,081. The excess of means over liabilities, is \$289,746.50.

The number of passengers carried on the road during 1857, is 190,168, and the amount received from them \$248,299.01; the amount earned from freights is \$110,027.12; from express, etc., \$9,862.48; total, \$368,188.61. The disbursements for repairs of track, bridges, laborer's wages, fuel for engines, shops and trains, repairs of engines and cars, salaries of officers and employees, etc., amount to \$141,473.97.

The net earnings are \$204,684.65; not receipts from all sources \$230,473.29. After paying the interest on the bonded debt of the Company, taxes, the amount due to the Dayton & Western Company, etc., there is a surplus on hand of \$3,587.39.

Of the passengers carried, 91,275 were going East, and 98,911 were going West. The earnings from way passengers were \$138,730.94, and from through passengers, \$109,568.07.

The decline in Foreign imports at New York, for this year, has already reached the amount of \$26,000,000; while the decline in exports, exclusive of specie, is only \$990,442.

In Boston the Foreign exports last week were \$192,112—against \$1,037,705 for the corresponding week last year.

We subjoin our usual quotations from Hewson and Holmes' Stock Circular:

The stock market has been more active in the past week, with a large increase of sales at improved prices.

The sales of Indianapolis & Cincinnati shares have been large, opening at 42 $\frac{1}{2}$ and closing at 45; Columbus & Xenia closing at 74; an improvement of 1 per cent. Little Miami is steady at 75. Hamilton & Dayton is held firmly at 45, with very little offering at this price. Ohio & Mississippi at 5, and Marietta & Cincinnati at same price. Farmers Bank, Kentucky, stock 112.

In Bonds we have sales of \$20,000 Covington & Lexington 3d mortgage at 35 @ 35 $\frac{1}{2}$; second mortgage at 55 $\frac{1}{2}$. Hamilton & Dayton second mortgage 7's at 70 and interest. Little Miami 6 per cents at 75 and interest. Hillsborough & Cincinnati 1st mortgage at 25. In County Bonds there has been a more active business

with sales of Carter County, Ky., 6 per cent, bonds at 47. Bath County, Ky., at 44 to 44 $\frac{1}{2}$; these Bonds must prove a good investment at these figures. We also note sales of Springfield city, Ohio, 7 per cents at 60. Indiana Central R. R. 1st mortgage 7's at 70 $\frac{1}{2}$, and Little Miami Dividend scrip at 75. Trust Company Certificates go slowly at 35.

The demand for money has considerably increased, but good paper has been passed quite freely at 10 to 15 per cent. Second class paper has moved with great difficulty at 2 to 2 $\frac{1}{2}$ per cent. per month. The increased demand for money has, no doubt, been caused by preparation for the payments of the 4th inst., which are understood to be heavy. Confidence is quite firmly established, and in the main, the money market is better supplied with capital, with a very decided and growing tendency to greater ease.

Exchange on the East is in fair demand, with a supply fully up to all the wants of the market. We continue our quotations, $\frac{1}{2}$ to 1 per cent. prem., with occasional sales an $\frac{1}{2}$ below these rates. Baltimore and Philadelphia rates are usually $\frac{1}{2}$ below those of New York; we note sales on Baltimore as low as $\frac{1}{2}$ prem. New Orleans funds are more abundant, and rates are lower; $\frac{1}{2}$ to 1 prem. for favorite signatures is about the range of prices. Gold is without demand.

CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE.

BY HEWSON AND HOLMES,

March 3, 1858.

BONDS.

\$10,000 Gov. & Lex. R. R. Co. 7 per cent.	
3d Mort. Bonds.....	35
\$10,000 Gov. & Lex. R. R. Co. 7 per cent.	
3d Mort. Bonds.....	35 $\frac{1}{2}$
\$5,000 Gov. & Lex. R. R. Co. 7 per cent.	
3d Mort. Bonds.....	55 $\frac{1}{2}$
\$2,000 Cin. & Ham. & Day. R. R. 7 per cent.	
2d Mort. Bonds.....	70 and int.
\$6,000 Little Miami R. R. Co. 6 per cent.	
1st Mort. Bonds.....	75 and int.
\$2,000 Bath Co., Ky., 6 per cent. Bonds..	47
\$4,000 Carter Co., Ky., " " " " " "	44
\$2,000 " " " " " " " " " "	44 $\frac{1}{2}$
\$1,000 Hillsboro & Cincinnati R. R. Co.	
7 per cent. 1st Mort. Bonds.....	25
\$2,000 City of Springfield, O., 7 per cent.	
Bonds.....	60
\$1,200 Col. & Xenia R. R. Co. 7 per cent.	
Div. Bonds. Due in '62.....	83
\$1,930 Little Miami R. R. Co. 6 per cent.	
Dividend Scrip.....	75
\$3,000 Indiana Cent. R. R. Co. 7 per cent.	
1st Mort. Bonds.....	70 $\frac{1}{2}$

STOCKS

160 Shares Indianapolis & Cincinnati....	42 $\frac{1}{2}$
50 " " " " " " " " " "	44 $\frac{1}{2}$
90 " " " " " " " " " "	45
100 " Columbus & Xenia.....	73
20 " " " " " " " " " "	74
40 " Cin'ti., Hamilton & Dayton..	45
75 " Little Miami R. R.	75
33 " " " " " " " " " "	75 $\frac{1}{2}$
50 " Ohio & Miss. R. R.	45
200 " " " " " " " " " "	5
60 " Marietta & Cincinnati.....	112
20 " Farmers Bank, Ky., stock.....	112
\$3,000 Ohio Life Ins. & Trust Co. Bank,	
Certificates of Dep.....	35

The Turkish Admiral Mahommed Pasha, so long expected in this country, was at the Naval Arsenal of Ferrol, in Spain, on the 30th Jan., superintending the work of repairing the line of battle ship Fethie.

GALENA AND CHICAGO UNION RAILROAD.—

The following are the earnings of this road for January, compared with those of the corresponding month in 1857:

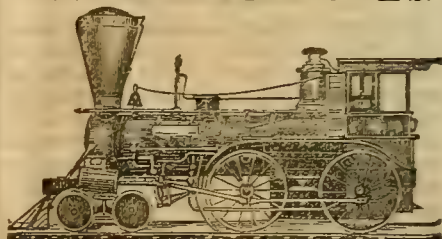
	Jan., 1857.	Jan., 1858.	Increase.	Decrease.
Freight.....	\$50,611.92	\$51,135.69	\$4,513.17	\$6,062.79
Passengers..	32,564.03	26,921.25		
Mail, &c... ..	3,433.95	3,227.06		106.76
Totals....	\$86,969.87	\$81,373.50		\$1,596.37

ECLIPSE SHINGLE MACHINE

THIS Machine has been in operation at the Saw Mill of Cameron, Story & Malone for the last six months, at the Mouth of Mill Creek, Cincinnati. For simplicity and durability, it can not be excelled; any ordinary hand can run it and make from 10 to 15,000 shingles per day.

For information as to Machines or Rights, address the undersigned Patentee, or G. H. Knight & Bro., Solicitors of Patents, Washington, D. C., and Corner Vice and Fourth Streets, Cincinnati, O.

JONATHAN CREAGER, Patentee,
March 4, 1t. 218 Barr Street, Cincinnati.

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20 MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and iron Forging of almost every description, etc., etc., at the OLD STAND.

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES.
Of the late firm of Bridges & Bro.
JOEL C. LANE.

feb4tr

IRON BOILER FLUES
PASCAL IRON WORKS.MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1 $\frac{1}{2}$ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From $\frac{1}{2}$ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,
PHILADELPHIA. [aug

RAILROAD IRON.
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

H. GOODMAN & CO.,
no. 7 Wall st., N.

SANTA RITA SILVER MINING CO.

Under the above title it is proposed to organize a joint stock company with a capital of one million dollars, divided into shares of One Hundred Dollars each, to work the Salero and other mines in the Santa Rita Mountains near Tubac, in the Gadsden Purchase, or, as it is now known, the proposed Territory of Arizona. The mines proposed to be worked by this company, comprise twenty distinct veins of silver ore, which here occurs in the shape of a sulphuret of silver, mixed with the sulphuret of copper, antimony, and other metals, in regular veins imbedded in a gangue of quartz rock, and also in veins of silver bearing lead ores. All these ores are easily worked in the vein, and can be reduced to the metallic state by the simple process of smelting.

Arizona is at the present time the most interesting of the Territories of the United States. Unlike Oregon, Minnesota, Kansas and Nebraska, which have never, till recently, been inhabited by civilized men, Arizona was actually inhabited by the Spanish. Its valleys were once cultivated by the hand of industry, and its mines were worked by civilized men. This fact is sufficiently attested by the ruins of its buildings, and the records of its history. Some very interesting notices of the early history and development of this country will be found in the Third Volume of the Report on the Pacific Railroad Surveys, as recently published by the United States Government, in Ward's Mexico in 1827, and in Wilson's Mexico—Its Peasants and its Priests, and in the Reports of Lt. Michler, Major Emory and others to the United States Government. It contains some of the finest mission buildings erected by the Spanish Jesuits in this country. It was subsequently desolated by one of the fiercest Indian wars ever carried on, on this continent. The Spanish conquerors had enslaved the Indians, and compelled them to work the mines. Galled by slavery and thirsting for revenge, the Apaches seized the first favorable opportunity which was offered by the withdrawal of the troops, rose in rebellion, murdered their task masters, and reduced this then civilized region to its former wilderness state. Its towns were deserted, its mines abandoned, and its fields and highways overgrown with weeds. Such was its condition when it came into the possession of our government by the Gadsden Purchase.

The following extract from the Report of Col. Chas. D. Poston, Agent of the Sonora Exploring and Mining Co., under date of Jan 31, 1857, will give a fair idea of the condition of the country at that period:

"It may not be amiss, in these desultory remarks, to note the improvement in Tubac and the adjacent country since our arrival. When we forced our wagons here, over the undergrowth on the highway, in September last, (1856) no human being was present to greet our coming, and desolation overshadowed the scene. It was like entering the lost city of Pompeii. The atmosphere was loaded with the malaria of a rank vegetation, the undergrowth in the bottom served as a lurking place for the deadly Apache, and the ravens in the old church window croaked a surly welcome.

"Now the highroads are alive with trains and people. Commerce, agriculture, and mining are resuming their wonted prosperity under the enterprise, intelligence and industry of our people. The former citizens of Tubac have returned to the occupation of their houses, set to work vigorously on their milpas, and are loud in their praises of American liberty and freedom.

"At our municipal election on Christmas, fifty-five votes were polled and our excellent member Ward elected Alcalde. The number of souls in or near Tubac numbers over one hundred and fifty, and every week adds a number of families to this increasing population."

The circumstances which desolated this region no longer exist. American enterprise is beginning to re-develop this territory, and it may be added, in the language of the Jesuit Missionary, who explored this region in 1687:

"A scientific exploration of Sonora, with reference to mineralogy, along with the introduction of families, will lead to a discovery of gold and silver so marvellous that the result will be such as has never yet been seen in the world."

The predictions of this hardy and dauntless missionary were verified in the rapid settlement of this country, and the opening of hundreds of mines of the precious metals between that period and 1757. It is on record that the Salazar Family took out of one Placer, in a very short time, three millions of dollars. It is also a matter of history that:

"All these settlements and missions were founded in fertile valleys, and by streams and springs, which produced luxuriant crops of wheat, corn, and beans, and in many parts grapes and other foreign fruits were cultivated."

The hardy and enterprising population now teeming into Arizona will soon rebuild its ruined towns, and make its abandoned mines again the means of enriching the world by their product of the precious metals. In this state of things it needs no prophet's voice to foretell that the companies earliest on the ground, with ample means, will secure fortunes which those later at the scene of operations will fail to obtain.

SANTA RITA MINES.

The Santa Rita Silver Mining Co. propose to commence operations on the old and famous Salero Mine, which took its name from the following incident in its early history:

"When the Bishop of Tumacacori, a mission three miles south of Tubac, came to take charge of this diocese, he complained much of the hardships he had to undergo in this northern province compared with the luscious fare and rich viands of his former residence at the south, and one day at table said he had not even a salt cellar to hold his salt. One of his zealous parishioners said, 'Wait until next Sunday and I will bring you one.' He immediately took to the mountains, and fashioned a rude salero from the silver mine in the Santa Rita Mountains, which in due time graced the Bishop's table, and gave its name to the mine."

The "Salero" is a regular vein of the Sulphuret of Silver and Copper, two and a half feet wide at the surface, and outcrops for a distance of one and a half miles in a north

and south direction. The old shaft has been cleaned out to the depth of eighty feet by the engineers of the Sonora Exploring and Mining Company. It is held by indisputable titles derived from this Company. The other veins in the same mountains partake of the same general character of ores, and are parallel to the Salero. They yielded during Spanish rule from six to twelve marcs (\$51 to \$102) to the carga (300 lbs.) of ore.

The Santa Rita Mountains, in which these mines are situated, border in a north and south direction the valley of the Santa Cruz river. The summits of the mountains are covered with pine, and the valleys are filled with cottonwood, walnut and oak. The slopes of the mountains and the valleys of the streams are covered with grass, which affords excellent pasturage. The soil in the immediate vicinity of the streams is capable of the highest cultivation, and produces all the fruits known to a southern climate—grapes, wheat, corn and cotton. Its climate is declared by Ward, Wilson, Gray and others, to be as "attractive as its mineral riches." Its pure mountain air is bracing and salubrious.

VALUE OF SILVER MINES.

So little is known in our country of the value and produce of the silver mines of Mexico, that it is difficult for the mind to conceive the enormous results which have been accomplished in this field of labor. The Mining Records of Mexico, however, which were made by the Government officials for purposes of taxation, which, under Spanish rule, amounted to one-fifth the proceeds of the mines, show results rather under than over the actual produce. According to these Records, Humboldt estimated the whole produce of the Mexican Mines from the conquest up to 1803, at \$1,767,952,000.

Among numerous instances of individual profit from working mines, the Historian, Ward, states that Zambrano paid, as his tax of one-fifth the proceeds of his mine, \$11,000,000. The mine of Arevalo, in 1811, yielded in seven weeks, \$200,000 from one level called El Divino Pastor. The Biscaina vein, which in 1726 had produced \$4,341,600, and was subsequently abandoned on account of water, was re-opened in 1762, and in twelve succeeding years produced \$6,000,000. The mines discovered by the Indian brothers Arauco, in the district of Morelos, in 1826, produced in two months \$270,000. In 1825, the owner of the mine of Nueva Sonora de Guadalupe refused \$1,000,000 for the privilege of working it three years.

The mine of Arevalo at Chico, is stated to have produced from 1804 to 1824, \$250,000 per annum. The mines at Real de Arriba, in the district of Temascaltepec, produced weekly twelve bars, or \$13,000. The Santa Rita mines at Zimapan, upon the years 1791, 1792, and 1793 left a profit of \$100,000.

The mine of Santa Eulalia, near the town of Chihuahua, from 1705 to 1737, produced \$55,959,750, or an average of \$1,748,742 per annum. From 1737 to 1791, it yielded over \$44,000,000. Making a total of over one hundred millions of dollars in 86 years.

Col. Chas. D. Poston, Agent of the Sonora Exploring and Mining Company in his Report of January, 1858, estimates the produce of the Heintzelman Mine, belonging to that Company, at One Million Dollars for the coming year, basing his calculations upon actual results, already obtained, with a force of fifty men.

The enormous profits of the mines mentioned above, are well authenticated facts taken from government records of taxation. They were accomplished with the rudest implements and without skill, enterprise or capital. The average yield of the ores, according to Ward, did not exceed 24 ounces to the cwt. of ore. The miners drained their works by carrying water in rawhide sacks up ladders of notched logs. The ores were raised in the same tedious and laborious manner; and the crushing and smelting performed with the exercise of as little skill and enterprise. And yet these mines have yielded the most enormous fortunes that have ever been acquired in the history of the world.

The inference may be clearly drawn, that with American enterprise and skill to direct the native labor which can be cheaply procured on the spot, the above enormous gains could be greatly increased. Many of the gold mines of California, are now yielding sums which rival the most extravagant of the above statements.

Lt. Mowry, the delegate elect to Congress, from the proposed territory of Arizona, estimates the future annual produce of the mines of Sonora, at one hundred million dollars, a sum equal to double the present produce of California.

ESTIMATE OF THE PRODUCE OF THE SALERO MINE.

In the present condition of the Salero Mine, it is of course impossible to give an exact estimate of its annual produce. We know that it contains rich ores in the greatest abundance. Col. Poston, in his report on this mine to the Sonora Exploring and Mining Company, says, "The ores in this one peak cannot be exhausted by the labor of a thousand hands in a hundred years; and it is the almost universal experience of miners, that ores of silver increase in value the greater distance you go from the surface. If this be so, the interior of this peak must be almost a formation of silver, and in time to come, will no doubt be honey-combed through and through, in following the ramifications of these different veins of ore. The immediate vicinity of the mines affords water in several different streams, wood in scattered clumps of small live oak, and grass and pasturage sufficient for thousands of cattle and sheep!"

The following is an extract from a letter of Lt. Mowry, on the subject of the Santa Rita Mines:

WASHINGTON CITY, Feb. 18, 1858.

MY DEAR SIR:

The ores of the Santa Rita Mountains and of the Cerro Colorado, are probably the richest of the whole mining region of Arizona, in Silver.

They occur as Sulphurets of Copper and Silver, galena ores, native silver, and very rich ores of silver, containing a per centage of gold. I have, in my possession, a specimen of ore which is, without doubt, a very rich sulphuret of

silver and copper in a quartz lead. This specimen is from Cerro Colorado. The Sopori mine is of the same general character of those of Santa Rita, and in the gulch below the mouth of the mine, the Indians have, for a long period, obtained pieces of gold and silver fused together by volcanic action, weighing several dollars.

From specimens taken at random from the Sopori, I have cut native silver with a penknife as easily as you can cut it out of a Mexican dollar.

Mr. E. Brevoort, Postmaster at Aguas Calientes, informs me that in the mountains in rear of Aguas Calientes, the silver region is richer than any that has yet been opened.

The possession of the Apache Indians, thus far, has prevented any thing beyond halting prospecting.

The traditions of the country tell of mines in the Santa Rita, from which the Jesuits took pure silver in masses—cutting it from the vein with chisels—and we know that large pieces of native silver have been found in "placers" within the last few years. Col. Emory confirms this in his Report.

My own impression is, that the discoveries thus far—wonderful as they are—are only the prelude to much greater ones, when capital and organized labor shall begin to develop our Territory as its resources demand. It should be mentioned that the veins both of silver and copper of Arizona run much nearer the surface, than in the mines of Mexico further south; and that the cost of mining is thereby much reduced.

Very truly yours,

SYLVESTER MOWRY.

WM. WRIGHTSON, Esq., Cincinnati, O.
The following estimate of the produce of the Santa Mine, may be given as the nearest that can be made at the present time. It is based upon data carefully obtained from the results of mining in California and Mexico. In California, a single miner will raise a ton of gold bearing quartz per day. It costs to raise, crush and extract this, from \$10 to \$12 per ton. The cost in Mexico no where exceeds this. But in order to make a safe estimate, let us assume that a single miner will raise but 300 lbs., or in mining parlance a carga of ore per day, and that the cost of raising and smelting the ore is \$50 per ton, and we shall have the following result, for a force of fifty workmen.

PRODUCE OF 50 MEN.

50 men at 300 lbs. per man per day, 15,000 lbs.
Value at 6 to 12 marcs, (\$51 to \$102.)
per Carga, (300 lbs.) \$2550 to \$5100
Cost of mining and smelting, at \$50 per ton, 350 to 350

Net profit per day, \$2200 to \$4750
Net profit per year of 300 days, \$660,000 to \$1,425,000
Probable annual dividend,66 per cent to 142 per cent.

Enormous as such dividends as the above would seem, there is ample evidence that such have been made in many mining operations. The reports of 26 English copper Mining companies, show them to have paid 1056 per cent on the capital invested in them, and to be paying at the present time an average annual dividend of 134 per cent for each of them. Many of the Mexican mines mentioned above, would have yielded much larger dividends on a capital of a million of dollars, than those here estimated. And yet a comparison of the value of the ores shows largely in favor of the ores of the mines of Arizona. Both Humboldt and Ward, and all the modern explorers agree in testifying that the veins of silver ore grow richer as you approach the north and also appear nearer the surface, thus reducing the cost of extraction. Many of the Mexican mines have already reached a depth of 800 to 1200 feet, and yet pay enormous profits on their tedious and expensive mode of operating them. The Santa Rita mines will mostly pay at the very surface.

PROSPECTS OF THE COMPANY.

The capital stock of the Santa Rita Silver Mining Company, is proposed to be put at one million dollars, to be divided into ten thousand shares of one hundred dollars each. One half of this stock is to be given for the ownership of the mines and the work already done. The balance of the stock is to be sold at an assessment of twenty per cent which will furnish abundant means for the erection of smelting and crushing works and machinery for the active and energetic prosecution of the work, and extension of interest. It is proposed to send to these mines a colony of good mechanics and reliable men, to direct the operations of the company. With ample means, it is confidently believed, that the works can be erected and smelting actually begun within six months from the sailing of the expedition from New York, and that the operations of the second six months will pay a handsome dividend on the full face of the stock.

The ores of this region have been assayed by Prof. John Torrey, of the United States Assay Office in New York; Prof. J. D. Booth, of the United States Mint in Philadelphia; Prof. Louis A. Garnett, of United States Branch Mint in San Francisco; Prof. Joseph M. Locke, of Cincinnati; Messrs. E. D. Kinsey, of Cincinnati; Prof. W. P. Blake, of the Smithsonian Institute, Washington, D. C.; Messrs. Wass, Unay & Warwick, Practical Smelters and Metallurgists, San Francisco, California.

Proposals are now invited for 5000 shares of stock, at 20 per cent. The form of subscription is annexed. Those desiring to take an interest in this matter, should promptly sign the subscription and send it to the office of the company.

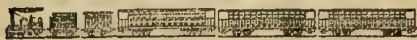
W. WRIGHTSON, Sec'y.

No. 167 Walnut street, Cincinnati, O.

FORM OF PROPOSAL.

Proposal for Shares of Capital Stock. To the Secretary of the Santa Rita Silver Mining Company.
I hereby propose to take Shares of One Hundred Dollars each, of the Capital Stock of the SANTA RITA SILVER MINING COMPANY, and to pay for the same an assessment of twenty per cent., being \$20 per share in full payment of the same, on demand of the Secretary of the Company, thirty days from this date. This subscription shall not be binding, unless 2,500 Shares shall be so subscribed.

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FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

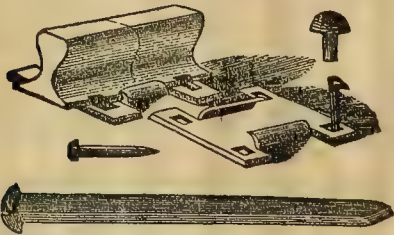
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Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. H. C. LORD, President.

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The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

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No. 228 H Street, Washington, D. C. april2

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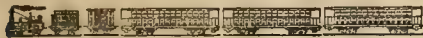
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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING.....MARCH 11, 1858.

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THE SETTLEMENT OF RAILROAD DEBTS.

A very important, curious, and difficult question has arisen in regard to Railroad Debts. The case is this. Take Ohio, for example. Of the entire cost of railroads in Ohio, considerably more than half exists in some form of debt. Not estimating the cost of railroad construction accurately, and, perhaps, fearing to face the absolute truth, many railroad companies have been compelled to repeat the operation of borrowing, till they have 1st, 2d and 3d Mortgages, Income Bonds, and a floating debt besides! Some of these roads have the promise of great success, if they could be disembarassed. But, how is this to be done? Here are creditors existing in five different grades of rank and degrees of security. How are they to be reconciled? This is the real problem. It is not so much the amount of debt, as the great embarrassment of these conflicting claims. They must be settled in some way, or many roads must be sold out. We hear that the *Scioto and Hocking Valley Road* has made an assignment, and such is likely to be the case with others, unless some remedy can be discovered for existing liabilities. The courts have put forth their power to rescue them from destruction, by protecting the machinery of the road from execution, on the ground that it is necessary to the security of the First Mortgages. But, this can not last long; for it carries with it an idea of injustice, which will soon cause Legislative interference. Already we hear of a Bill before the Legislature, the object of which is to provide for a prompt sale, by the First Mortgagees, or to secure the rights of Mortgagees. The effect of this is most obvious. It will work a two-fold injury of great magnitude. If a road be sold by the elder Mortgages, it will never be sold for

more than they amount to. The consequence will be, that all subsequent creditors will be entirely cut off. Again, if in this manner a road can be sold for 40 per cent. of its cost, the new proprietors will enter into competition with other companies, which have actually paid in full; so that good railroad stock will be reduced half in value. In this manner a large number of persons and immense interests will suffer. Is the difficulty an irremediable one? We think not altogether. In the first place we must recognize certain plain facts. 1st. If there be forced sale by 1st Mortgagees, or 2d Mortgagees, all the subsequent debts and the stock are absolutely lost. 2dly. The subsequent creditors and stockholders will be gainers by *any arrangement*, which will save them a part of their debt and stock. 3dly. That no arrangement is possible, and nothing gained to them, unless by a *consolidation of interests*. 4thly. That no such consolidation is possible, except by the intervention of a higher authority—the Law; for the number and distance of parties will prevent a general consent.

Now, in this condition of affairs, we see no way, but a Legislative action, which shall empower the Governor or Supreme Court to appoint a Receiver for each embarrassed railroad, with power, first, to call all parties interested before him, to ascertain the amount and degree of debts; secondly, to propose a plan of consolidation, which, by *consent of a majority of parties*, in each rank, shall be carried into effect; and, thirdly, to bring absent parties before him *by publication*; fourth, the plan of consolidation thus perfected to be recorded and made the only lien upon the road, by these parties. Fifth, that all parties who refuse to take advantage of the consolidation shall be excluded from its benefits.

We feel perfectly sure that with some such intervention of law as this, a consolidation of debts for each solvent road may be made; and equally sure, that without it an immense railroad interest is to be either lost or greatly damaged. The main thing is to bring the *parties together under authority of law*. This alone will accomplish much. If different grades of stockholders are to tear each other to pieces by law, they will also destroy the roads, and the stockholders. In making a consolidation, it is obvious that the holders of stock and floating debts can well afford to be liberal. Unless a road is sure of making immense profits, they have little prospect of recovering one dollar against the Mortgagees. On the other hand, the elder lien holders have no small stake in getting all debts quieted. For, if they are not, sooner or later the road must be sold. What then is their condition? They will be compelled to buy it in; and that necessarily incurs the expenditure of more money, and the running of the

road. All this they did not expect, and are probably not prepared to do. Something they can, therefore, afford to concede, provided there is the certainty of receiving interest.

We believe, therefore, there is a possibility of consolidating, and protecting, and ultimately realizing a profit from embarrassed railroad companies; but it can never be done while there are so many sets of creditors and conflicting interests.

We call the attention of our readers to it; because we believe that some legislation on this subject may be useful. We know well enough that the courts appoint Receivers; but we also know that ordinary receivers have not the powers we propose to give them. At any rate the subject is worthy of attention and examination.

SOUTHERN PACIFIC RAILROAD.

We are informed by a circular of George S. Yerger, the President, that the stock of the Southern Pacific Railroad sold on the 17th February, for the non-payment of the assessments then over due, "was purchased by some gentlemen who have a large interest in the road, and they have instructed him (Mr. Yerger), that should any stockholder wish to pay the amount due on his stock within one month from this date (Feb. 19), to permit him so to do, and to issue him his Certificate of \$4 paid."

We have also received assurances to the same effect from gentlemen who were in our office to-day, direct from New Orleans, that the purchasers were not desirous of retaining the stock thus bought, and that they would, within a reasonable time, allow parties to redeem.

We give the above information for the benefit of stockholders, leaving them to be their own judges of the proper course to pursue.

Below we give entire the resolutions of the Board, and the Circular of the President:

WHEREAS, The present urgent indebtedness of this Company, and the terms of the contract with Messrs. J. T. Grant & Co., for the completion of seventy miles of Road, render it absolutely necessary that the Company should realize at once, the Installments of its Stock remaining due and unpaid on the 1st January, 1858, and without discrimination, where payments have not been made, or some satisfactory arrangement entered into for the adjustment of all such indebtedness by the Subscribers or holders of the Stock Certificates, upon which there remains unpaid Installments—Therefore, be it

Resolved, By the Directors of the Southern Pacific Railroad Company, that the said Directors proceed, on the 17th day of February, 1858, between the hours of 10 A. M., and 4 P. M., at the Company's Office, in the City of New Orleans, to sell at public auction to the highest bidder, for cash, all the Shares of the Subscribers to the Capital Stock of said Company upon which installments are past due and unpaid—said Shares to be transferred on the Books of the Company, to the purchaser or purchasers thereof, as provided by the 6th Section of the Charter of this Company.

Resolved, That if the proceeds of sale, in any case, shall not be sufficient to pay the amount due by the Subscribers whose Stock is sold, with interest and charges thereon, the President of the Company is authorized, in his discretion, to cause to be instituted the proper legal proceedings to collect the deficit from such delinquent subscribers, or to compromise, sell or dispose of the same, to any person or party, at discretion, and make such transfer thereof, as he may deem proper in the premises.

Resolved, That the President shall give a proper public notice, that a sale has been made of all Stock, with 24 per cent. and less sums paid thereon; and also have a Circular Letter addressed to each subscriber whose name appears

on the Books of the Company, notifying them of such sale, so that no misapprehension shall exist, and thereby all future sales and transfers may be stopped by the mere delivery of the Certificates of Stock, which may be outstanding.

OFFICE SOUTHERN PACIFIC RAILROAD CO.
New Orleans, Feb. 19, 1858.

Sir: In accordance with the above resolutions, passed by the Board of Directors of this Company, I beg leave to inform you that all Stock in your name, upon which Installments were due and unpaid, was sold at public auction on the 17th inst.

This Stock has been purchased by some gentlemen who have a large interest in the Road, and they have instructed me, that should any Stockholder wish to pay the amount due on his Stock within one month from this date, to permit him so to do, and to issue to him his certificate of \$4 paid. Official information has been received, that the twenty miles of the Road, required by our Charter to be completed by the 15th of this month, was finished, and the cars running thereon on the 11th inst.

Very respectfully, your obedient servant,

GEO. S. YERGER, President.

Our readers having an interest in this stock will thus perceive the fact, that if their assessment has not been paid, their stock is now forfeited and belongs to some one else, and also that they have till the 19th of March to redeem the stock by the payment of the assessment.

The sale of stock notified in the above circular, is the first that has been made by this company for unpaid assessments, and it has been made under the most extraordinary circumstances. This road passed into the hands of Trustees during the fall, by the action of its New Orleans President and Board of directors. Of this fact the stockholders were *not* apprised by the Board; and would never have known it, but for the voluntary and in many instances not very complimentary notices of the newspapers of the country. The circumstances under which this deed of trust was made, were *never* made known to the stockholders.

On the 22d of December a report and circular were issued in *New Orleans*. This report stated that the Deed of Trust *would* be cancelled, and that installments were due on the first Monday of January. Whether the Deed of Trust *has actually been* cancelled or not, the Board have *never* deigned to inform the stockholders. On the 17th day of February *all* stock on which assessments were unpaid was sold, and by a stretch of generosity on the part of the purchaser, *one month* was allowed the owners to redeem their property. The circular giving this information is dated the 19th day of February.

A little calculation of time consumed in conveying these circulars to the stockholders will show the *justice* (?) of these summary proceedings on the part of the Board of Directors. It takes fully *ten* days for a letter mailed in New Orleans to reach Cincinnati—longer to reach the smaller towns in the country. Admitting that the circulars were mailed promptly on the day they purport to have been issued to *all* the stockholders, and the circular of Dec. 22 would not have reached *one-third* of them by the first Monday in January, the day on which the assessment should have been paid in New Orleans. But

they were *not* mailed promptly to *all*. We know instances where they did not reach their destination till near the close of February. Admitting in like manner that the circular of February 19 may have been mailed promptly to every stockholder, there would be barely time for those in the large cities to return an answer by the time specified. It is an absolute, physical impossibility for those in the smaller towns to do so.

The Board of Directors have, therefore, placed themselves in a very singular position by their summary proceedings. A superficial observer, who was disposed to be ill natured, would reason somewhat in the following strain. "These Southern gentlemen in assuming the direction of the road, openly complained of its northern stockholders. They have introduced sectional prejudices into the financial management of a great national enterprise. Who knows but that they have determined to transfer its whole management and ownership to the section they represent. They pretended to sell the road by a Deed of Trust, and thus make people believe its stock was worthless, and that the assessments would never be called in. Next they notify us, but not in time for us to receive the notice, that we must pay our installments, and that the Deed of Trust would (*probably*) be cancelled. Before some of us hear this, they sell our stock and again notify us that we may redeem it within a month, and the month is already nearly expired before this notice reaches us." We say that a superficial observer might reason somewhat in the above style, and hastily and ill naturedly conclude that the whole operation was designed as a swindle to deprive him of his interest in the enterprise.

For ourselves, we are of the number of those who believed that the stock of a road which had the immense land grants of the Southern Pacific Railroad, could have been made valuable. That our country as a whole should build a national highway for the commerce of the world on the track which nature had plainly pointed out as the best for such a work. And that the superior advantages offered by the charter of this company, afforded a reasonable prospect of the profitable completion of this great national enterprise under its auspices. We confess that the execution of a Deed of Trust by the Board of Directors, and their extraordinary and summary proceedings and short notices of the assessments and sale of stock have shaken our faith in its management. We trust that its directors can and will explain these things to the satisfaction of the world. They are bound to do so, by every consideration moral and legal, which can influence honorable men. And they should in doing this, show some consideration for the rights of those even in the north, who have put their money into this enterprise.

Correspondence of Railroad Record.

St. Louis, March 8, 1858.

MESSRS. EDITORS:

St. Louis is unquestionably destined to become one of the largest—if not the largest inland city in the world. Its site is equal to any in the country, while its peculiar location, just below the mouth of the great Missouri—draining the vast empire of the west, and at the head of navigation on the Mississippi for large steamers, gives it all the advantage that could be desired in a commercial view. But when we take into the account the fact that it is within reach of one of the richest and most extensive mineral regions—teeming with iron, copper, zinc, lead, coal, limestone, etc., we combine all the elements necessary for building up a great commercial and manufacturing emporium. In addition to these, St. Louis has, in a marked degree, a spirit of enterprise and liberality, backed by a wealth fully equal to that of places of much higher pretensions, that will not fail to take advantage of every favorable circumstance calculated to build up its commerce or its manufactures.

St. Louis is one of the oldest cities in the West, having been settled in 1764 by the French under Pierre Liguette Laclède of the "Louisiana Fur Company." But its growth under the old French regime was slow for fifty-four years after its first settlement, viz: in 1820 it had only 4,123 inhabitants, and twenty years afterward but 16,649, so that its real progress dates from 1840. Its present population is about 150,000, and is daily increasing with so much rapidity, as to render it next to impossible to procure house room for the new comers, even at fabulous prices—houses of very ordinary pretensions, and a mile or more away from business, renting freely at from 600 to 1200 dollars per annum! Half of those prices would procure larger, more elegant, and better located dwellings in Philadelphia or New York.

In point of wealth, as before stated, St. Louis ranks among the older cities—her real estate alone being assessed at over \$60,000,000 two years ago. I have no means at hand of stating the value of personal property, etc. It is very large, however, and increasing with giant strides.

The commerce of St. Louis is unsurpassed by any inland city in the world—the number of steamboat arrivals are annually over 3,000, with an aggregate tonnage of upward 900,000 tons. The vast products of the rich vallies of the Missouri and its tributaries, and a great portion of the fertile plain drained by the Mississippi and the Illinois, find here a ready market, or are transferred to larger boats for the south, or the railways for the west and north. It is this necessary transfer of all the products of the upper rivers that form the basis of the city's growth; for, beside the toll it pays directly to the merchant and

shipper; it, of necessity, draws with it an immense demand for all the products of the mill, the loom, and the anvil, and as these can be manufactured as cheaply here as any where else, there is no reason why St. Louis will not speedily rival both Cincinnati and Pittsburg in the variety and extent of her manufactures. Indeed in some branches she rendered herself quite independent of either of these cities. She has already about thirty extensive foundries and machine shops, one locomotive shop, a half dozen large boiler yards, with hundreds of small shops in all parts of the city turning out all descriptions of handicraft articles. These establishments are daily increasing and enlarging, and in a few years will be equal to any in the west.

But, St. Louis could never achieve her real position without the railway element, which brings her near neighbor to Chicago, Cincinnati and the "east;" but, above all, to the vast mineral region of her own State, which are destined at no distant day to pour into her lap an untold wealth.

Yours, truly,

D.

Railroads.

CHICAGO AND MILWAUKEE RAILROAD.

We are in receipt of the Annual Report of the officers of this company for the year ending Nov. 1, 1857. The Report presents an interesting review of the operations of the road from its commencement, which will be found interesting. The Report says:

In submitting to you, at the close of our fiscal year, this, our Report of the present condition and prospects of your road, we deem it advisable, for purposes of explanation, to go somewhat into a detailed history of our enterprise.

In December, 1853, a contract was entered into between the company and Messrs. Stone & Witt, of Cleveland, Ohio, by which they agreed to furnish the materials, and construct the entire road of the company from Chicago to the State line; being a distance of forty-five miles; furnish an equipment of four locomotive engines, six first class passenger cars, two second class passenger cars, twenty box cars, and twenty platform cars; erect all necessary station and freight houses, shops and engine houses; furnish \$25,000 to pay for right of way, and fence the entire road for the sum of \$1,095,395, of which \$365,000 was to be paid in the capital stock of the company, \$487,000 in first mortgage bonds, and \$243,395 in cash; the road to be fully completed and equipped, ready to be delivered to the company on the 1st day of April, 1856. The contractors to have the right to use the road until that time, if by extra effort they should be able to get the same in running order at an earlier day. About contempora-

neous with the making of this contract, the Green Bay, Milwaukee & Chicago Railroad Company of Wisconsin, made provision for the construction of its Railroad from Milwaukee, south to the point on the State line, connecting with ours; and in the latter part of May, 1855, both the above contracts were so far completed, as that the contractors opened the entire line for business between Chicago and Milwaukee. On the 16th day of July, 1855, an arrangement was made between this Company and Messrs. Stone & Witt, by which they surrendered the road to the company, at its then stage of completion and equipment, for the consideration of \$125,000, payable in the capital stock of the company, in addition to the amount which had been previously paid them in estimates upon their contract. The entire cost of your road up to that time, including the amounts paid to the contractors on their contract, and as bonus for its surrender, engineering account, right of way, purchase of depot grounds, etc., amounted to \$1,405,686 09.

The cost of your road, in its present condition, has been largely increased by the purchase of ample and commodious depot grounds and obtaining the right of way within the city limits. It was first contemplated to establish these depots upon the north branch of the Chicago river, and north of and adjoining the grounds selected for the depots of the Chicago, St. Paul and Fond du Lac Railroad; but a short experience showed that point to be too remote from the business centers of the city, and other grounds were obtained upon the west side of the track of the aforesaid company, much more convenient for the transaction of our business. It should not, however, be assumed that any loss to the company has accrued by this change, as the lands first obtained were mainly purchased of the Illinois and Wisconsin Railroad Company, at what was then deemed, and has since proved to be, very low rates; and the surplus property thus left on our hands, has rapidly advanced in value, now constituting a valuable and available property; and steps have been taken to dispose of the surplus thus held, with a view to divide the proceeds among the stockholders.

On the 16th day of July, 1855, the operating department of the road was organized by the appointment of Walter S. Johnson as superintendent, and from that day to the first day of November of 1855, the gross earnings of the road amount to \$59,852 12, and the operating expenses of the same date, were \$17,477 18, for the details of which we refer you to schedule D of the superintendent's report.

During the period intervening between the 16th day of July, and 1st of November, 1855, the construction account of the road was increased by the purchase of additional road

furniture, payment of interest on bonds, fencing, buildings, payment for depot grounds and right of way, etc., to the amount of \$71,157 28; for a full statement of which, we refer you to schedule C of the secretary's report.

On the 1st day of June, 1856, one hundred income bonds, for \$1,000 each, were issued, payable on the first day of August, 1861, bearing interest at the rate of ten per cent. per annum, to provide for the payment of which, a sinking fund of \$20,000 per annum, from the earnings of the road, was appropriated and set apart. On the 1st day of August, 1856, a cash dividend upon the capital stock of the company was declared, and paid to the stockholders. The gross earnings of the road for the year ending Nov. 1, 1856, were \$279,733 34; and the operating expenses during the same period, were \$133,446 59. The construction account was also increased during that year to the extent of \$319,890 48, as per schedule C of the secretary's report. In view of the large amount of surplus earnings left unappropriated after the payment of the August dividend, and all charges for interest accruing upon the indebtedness of the company, the Board of Directors declared a further dividend on the first day of November, 1856, of fifteen per cent. on the capital stock, payable in certificates, due in two years from date, and bearing eight per cent. interest, payable semi-annually, which certificates were duly issued.

At about the time Messrs. Stone and Witt commenced to operate the road, it was deemed advisable, that our line of Railroad should obtain and hold an interest in the line of steamboats plying upon the Western Shore of Lake Michigan, and the steamer *Traveler* was accordingly purchased of E. B. Ward, who then owned and controlled the boats forming said line, for the sum of \$65,000, the said purchase being made on joint account, by our Company and the Green Bay, Milwaukee and Chicago Railroad Company, each paying *pro-rata* of said purchase, in proportion to the length of their respective lines; and an arrangement was made to run the boats so purchased, in the line with another boat, owned by Captain Ward, between Chicago and Milwaukee, at rates for passengers and freight, corresponding substantially with the railroad rates; and on the first day of January, 1857, the steamer *Planet* was purchased of Capt. Ward, and thereby this company obtained the entire control of this route. An amendment to our charter was obtained at the last session of the Legislature, authorizing our company to own and manage steamboat property, and also to sell its surplus real estate. The soundness of the policy which led to the purchase of these boats, will not, we think, be questioned, when our stockholders once understand that this steamboat

route is, or in the hands of other parties would be, a formidable competitor for the passenger and carrying trade between Chicago and Milwaukee, and especially when the experience of the past three seasons has fully demonstrated that the boats can be profitably run by the company, without serious interference with the business of the road.

The gross earnings of the road, for the year ending November 1, 1857, have been \$295,745 27, and the operating expenses during the same time have been \$121,325 15. During the past year, a brick fire-proof engine house has been erected in Chicago, with ample accommodations for eight engines, and which with the present equipment of the road, can be used also for a machine shop—and a commodious brick passenger house has been built at Waukegan; these both were accommodations imperatively demanded by the business of the road, and for the safety of our property, and in their construction reference has been had to economy as well as permanence and convenience; the station houses and other structures along the line of the road, are now deemed ample for the accommodation of its business, and no further large expenditures will be required for these purposes.

During the past summer, a basis acceptable to both parties, was fixed upon between this Company and the Milwaukee & Chicago Railroad Company, for their consolidation into one Corporation; but before the contemplated change could be fully effected, the sudden revulsion in the financial affairs of the country rendered it so extremely difficult to make satisfactory provision for carrying what would become the floating debt of the consolidated company, that all attempts to perfect such consolidation have been by mutual consent abandoned, and in this connection, we have to say, that your Board are unanimously of the opinion, that the net earnings of your road should be first applied to the total extinguishment of its floating debt. It is with no small degree of gratification, that we call your attention to the facts and figures embodied in the reports of the officers of the road, hereto annexed, showing the small percentage of our gross earnings which has been charged to operating accounts, as compared to that of other Western Roads, and also to the fact, that although the receipts of other roads, during the past year, have materially fallen off, there has been a decided increase in ours. Forming as our road does, the principal thoroughfare between the two great cities of the north-west, and the natural outlet for the immense tide of travel which must ever flow between the east and the rapidly developing territory of Northern Wisconsin and Minnesota, it must remain to a greater extent than most similar enterprises, free from the fluctuations and changes which the

vicissitudes of trade bring to other less favorably situated routes.

The financial condition of the road is as follows:

Statement of the Affairs of the Chicago and Milwaukee Railroad Co., Nov. 1, 1857.

Construction.....	1,446,338 51	
Depot Grounds.....	208,357 70	
Road Furniture.....	67,869 43	
Buildings.....	29,397 30	
Fencing.....	71,855 22	
Jefferson Street Planking.....	3,265 40	
Right of Way.....	73,860 85	
	\$1,861,642 41	
Real Estate.....	4,793 66	
Steamboats.....	120,000 00	
Stock, Tools, Materials and Fuel on hand	20,815 57	
Treasurer.....	2,439 01	
	\$2,012,690 65	
Capital Stock.....	\$989,500 00	
Interest Certificates outstanding.....	706 76	
Bills Payable.....	205,020 26	
First Mortgage Bonds.....	512,000 00	
Rent Account.....	2,465 62	
Unclaimed Dividends.....	3,265 00	
Certificates issued for Dividend No. 2.....	115,435 00	
Income Bonds.....	80,000 00	
Debts Owning.....	10,083 18	
Income Account, Nov. 1 1857.....	04,814 73	
	\$2,012,690 65	

Its earnings have been as follows:

Statement of the Income Account of the Chicago and Milwaukee R. R. Co., Nov. 1, 1857.

Gross receipts from July 14, 1855, to Nov. 1, 1855.....	\$ 59,852 12	
Gross receipts from Nov. 1, 1855, to Nov. 1, 1856.....	279,733 34	
Gross receipts from Nov. 1, 1856, to Nov. 1, 1857.....	295,745 27	
	625,330 73	
Net amount received from steamboats to Nov. 1, 1857.....	26,106 96	
	\$661,437 69	
Operating expenses from July 14, 1855, to Nov. 1, 1855.....	\$ 17,477 18	
Dividend No. 1, paid Aug. 1, 1856.....	78,830 38	
Interest account to Nov. 1, 1856.....	585 20	
Interest on 1st Mortgage Bonds, to 1856.....	11,668 13	
Div. No. 2, paid Nov. 1, 1856.....	118,650 00	
Operating expenses, year ending Nov. 1, 1856.....	133,446 59	
Am't. for depreciation steamer Traveler.....	14,411 78	
Operating expenses, year ending Nov. 1, 1857.....	121,325 15	
Taxes paid to Nov. 1, 1857.....	7,214 29	
Int. on 1st Mort. Bonds to Nov. 1, 1857.....	36,575 00	
Int. on Income bonds paid Nov. 1, 1857.....	10,900 00	
Int. on div'd. certificates, Nov. 1, 1857.....	4,433 40	
General interest and exchange account.....	12,865 86	
	567,222 96	
Net surplus Nov. 1, 1857.....	\$94,214 73	

GALENA AND CHICAGO R. R.

The Chicago Press gives the following summary of the Annual Report of this road.

The length of this road is 259½ miles, of which 30 miles is double track. There is also 42½ miles of side tracks, making a total length of 332¼ miles.

The construction account amounts to \$9,395,455.19, in which, however, is included \$1,330,997.97 of discount on bonds and bonus stock issued, which forms no part of the cost of construction, and excluding these, shows the cost per mile of track to be \$24,272.

In the cost of construction is included the expenditures made for land in Chicago (which has cost the Company about \$600,000, and could now be sold for \$1,500,000), and an equipment of 60 locomotives and 1,276 cars, on which has been charged in the construction account \$1,311,916.75.

To enable stockholders to compare the cost of this road with others, which do not have such extensive depots and rolling stock,

these two sums should be deducted, and it would show the cost, including all the depot buildings in and out of the city, and the land owned out of the city, \$18,517 per mile of track.

There has been \$105,646.36 added to the cost of construction during the year, which was expended in completing the second track, in fencing and for five freight buildings on the Fulton line. When the remainder of these buildings which are estimated to cost \$25,000, are completed the construction account will be closed.

The earnings for the eight months, which comprises the present fiscal year (changed by a vote of the stockholders to terminate on the 31st of December instead of the 30th April), are.....	1,641,669.33
The expenses charged to operating are, \$921,251.62, and the interest for the eight months on the whole funded debt is \$181,954.05.....	1,103,205.37
	\$538,463.46

But these expenses include the cost of improvements which have been made in the track, \$93,092 50, and of new rolling stock which has been added during the year, which makes the equipment now worth \$32,467 more than has been charged to construction.....

Showing the net earnings for eight months to have been.....	\$683,622.96
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The net surplus on hand is..... \$346,737.82 Which includes \$153,000 of the second mortgage bonds which have been bought and canceled, and leaves \$193,737.82 to be applied to a cash dividend, if the money had all been in hand.

The cash balance in the hands of the Treasurer on the 1st of May (\$47,497.79) added to the earnings over and above expenses of operating, (\$923,197.20); the proceeds of the sale of the second mortgage bonds, (\$747,000), and temporary loans made early in the season, (\$164,894.65), makes the total receipts for the season of \$1,882,589.64.

The payments for the eight months have been as follows:

Bills payable, \$781,510.50; Materials, \$199,242.52; Dividends, \$300,460; Cash paid for Cars, \$80,810.29; Interest coupons, \$170,997.63; Construction and improvement accounts, \$168,039.97; Advance to the Chicago, Iowa and Nebraska Railroad Company, \$12,458.29; Purchase of 66 bonds for sinking fund, \$47,550.75; and for supplies, \$38,644.19—making a total of \$1,799,714.14, and leaves cash now in the hands of the Treasurer, \$82,875.50.

The Company has now, strictly speaking, no floating debt, and a nominal one of only \$49,716.56, which is not yet due. The cash immediately available, and cash items in hand are in excess of the whole of the bills payable and debts of every kind (except the funded debt) by \$73,058.71.

The earnings of the road have fallen off since July \$298,438.88, but this all been on the through business, the local business having largely increased, especially on the Fulton line.

The Directors show that the road has earned in eight months eleven per cent. on its capital stock, after deducting the ordinary expenses of operating, and eight months interest on the debt, and that a five per cent. dividend has been paid. They express their regret that they have been compelled for the first time to postpone the usual February dividend, because they, with the whole commercial world, expecting a very large fall business from the immense crops then maturing, spent and amount equal to another dividend in procuring extra cars, engines and supplies to

enable them to secure this anticipated business. The commercial disasters of the fall, however, cut off the receipts to even three hundred thousand dollars less than those of the preceding year, and thus left them with an unnecessary amount of supplies and equipments on hand, all of which had to be paid for out of reduced earnings.

As soon as the business began to fall off, the Directors commenced cutting down the expenses. The following table will show the extent of the reductions which were made from month to month:

Months.	Earnings.	Amount of Pay Rols.	No. persons employed.
August.....	\$172,465	\$68,318	1,904
September....	250,354	66,599	1,807
October.....	255,538	61,255	1,581
November....	175,167	49,681	1,464
December....	86,636	31,621	825
January (est'd)	85,000	27,664	722

The consumption of materials was reduced in the same proportion, but engagements had been entered into early in the season, for supplies of many kinds, and these had to be received and paid for, which has reduced the amount of cash in hand, but will materially lessen the expenditures for this purpose the ensuing year.

The value of the materials now on hand is \$476,683.15, which is an excess of \$60,578.59 of the value on the 1st of May last. This supply is equal in value, though not in kind, to a year's consumption.

The Directors have also changed the plan of purchasing supplies, by paying therefor cash, instead of making any purchases on time. They have now only \$16,755.88 of the materials on hand unpaid for.

To make this change has absorbed a considerable amount of what would otherwise have been cash in hand, but the continuance of the system will not absorb any of the future net earnings.

The unusually severe frost and freshets of the preceding winter, greatly injured the iron and rolling stock, the road bed in some places, and a great many of the bridges, the repairs of which to a large extent have been made and paid for during this season.

All these circumstances have absorbed the net earnings of the road, but the Directors say that "if they could have anticipated so great a falling off in the business, or if there had been any warnings of the commercial revulsions, or even if it had occurred earlier in the season, they would have reduced the expenditures enough to have enabled the Company to have paid another five per cent. cash dividend out of even the reduced earnings."

On the question of "depreciation," the Directors present very full particulars. They show that the road bed, bridges, buildings and rolling stock have been appreciated above the amount which has been charged on these items in the construction account, but that the superstructure has depreciated about two hundred thousand dollars below the amount charged to construction. During the season, however, it has been improved to the extent of ninety-three thousand dollars, and is now in good condition for service, and they add: "True economy would not warrant a greater expenditure than is necessary to maintain it (the track) in its present condition, with some moderate improvements."

The attention of stockholders is called to the fact that the Company has built their whole road and works for cash, and at the lowest cash prices, and have never paid for work in stock or bonds, by which the cost of construction is apparently increased beyond its real value.

CINCINNATI AND COVINGTON BRIDGE CO.

The following is an abstract of the amendments to the charter of this company as given in the Covington Journal.

1. The Bridge Company is fully empowered to condemn any and all real property that may be necessary for the erection or convenience of the bridge, tollhouse, approaches, &c.

2. The city of Covington is vested with authority to levy a tax upon the taxable property of the city, to produce an amount sufficient to make good the loss by discount on the 90 bonds of the city for \$1,000 each, taken by the Company in payment of \$90,000 of the city's subscription to the stock of the Company; provided this amount shall not exceed the actual loss sustained by the company in the sale of the bonds; and provided further, that in no event shall more than \$31,500 be paid to the company on account of such loss by discount.

3 The city of Covington is empowered to levy a tax to pay the interest on said bonds; or may levy a tax sufficient to produce \$90,000 and therewith redeem the bonds. It is provided, however, that no tax shall be levied for the purpose of redeeming said bonds, nor for the payment of said \$31,500 exceeding one per cent. per annum, nor until the question of levying such tax shall be submitted to the decision of the qualified voters of the city, at an election held for that purpose.

An election for Directors resulted as follows:

R. H. Ranson, H. Bruce, J. W. Finnell, Amos Shinkle, Miles Greenwood, and Messrs. Sherlock and Pomeroy. The two latter are new Directors. The above amendments to the charter were adopted unanimously. We understand that quite a determined feeling was expressed to carry the Bridge on to its completion.

PITTSBURG, FT. WAYNE & CHICAGO R. R.

The earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Company for the month of January, as compared with those of 1857, were as follows, viz:

	1858.	1857.
Freight.....	\$40,199 73	\$68,770 73
Passengers.....	48,557 24	43,799 42
Mail.....	4,482 29	4,482 29
Rents.....	1,348 9	224 75
Miscellaneous.....	78 36	57 15
Totals.....	\$94,665 95	\$117,334 34
Total decrease, \$22,668 39, or 10 per cent.		

THE SOUTHERN PACIFIC RAILROAD.

We give below an article copied from the Texas Republican of February 20, published at Marshall, Texas. It is from the pen of an highly influential and intelligent citizen of Texas, and but sets forth the true policy for the stockholders of this road—that is, of looking more closely to their own interests in the selection of proper Directors and officers who will not consume all the means of the Company for their own salaries, and fritter away its resources for imaginary services. The election takes place in New Orleans next May; let those interested take proper, concerted and timely action on the subject, and good will no doubt result.

Our course in relation to the Southern Pacific Railroad Company is well known to

our readers. A real friend of the enterprise, it has been our desire to render our feeble exertions in its behalf, and if we have not been able to do this at all times, the fault has not been ours. We shall continue to pursue the independent course which we have always done, and where mismanagement occurs shall speak of it openly and freely. This legitimate stockholders, as well as every citizen of the country, ought to approve our course. A new order of things prevails. The Company has secured its charter, of which it can not be divested. No other company can be chartered to compete with it. We must, therefore, look to it as the only means of securing the Pacific road through our Territory. Under these circumstances, it seems to us, there is but one course for Texans to pursue, and that is to aid and strengthen the company by every just means. We mention this fact, in order that our position may not be misunderstood. As the first movement in this direction, we have addressed ourselves to the legitimate stockholders, whose friend we have always been, to perform their duty to themselves and to the public. We must look to them for the solution of the problem as to whether this work shall fail or proceed with energy.

TO THE STOCKHOLDERS OF THE SOUTHERN PACIFIC RAILROAD COMPANY.

The object of this article is briefly to call your attention to the value of your charter, and for the purpose of inspiring you to such action as may be advantageous to yourselves individually, and in order that the just expectations of the country may be realized.

1. It has no restriction as to time of completion. The company can build one mile or fifty annually as it may deem proper. This will enable it to take advantage of the most favorable time for raising funds, purchasing iron, and for prosecuting the work with energy. The road has a reserve of six miles in width through the public domain, and 5120 acres of land of the State donation, existing for ninety-nine years from the date of the incorporation. It has also 5120 acres, in addition, under the law granting sixteen sections of land to the mile to railroads.* It has also a loan secured from the State under the law loaning the school fund to Railroad companies, which fund the State has now on hand, loaning the company \$6000 per mile at six per cent. interest per annum, taking the bonds of the company at par, with a lien upon the road.

2. It is a conceded fact, that Texas has, unoccupied, more first class cotton lands within her boundary than all the other Southern States, capable of producing a larger amount of cotton than is raised, at present, throughout the world. Look at the vast extent of country east of the Brazos, essentially a cotton growing country, which will be tributary to this road. With the same display of industry, this portion of the State, north of 32 degrees, will produce at half the cost more hogs for market than the State of Kentucky.

3. Consider the value of the country west of the Brazos, and north of latitude 30 degrees to produce, with the same labor, and more certainty, double the amount of wheat that can be produced by the State of Michigan—weevil and rust never disturbing the crop, and winters too mild to freeze out the

* 256,000 acres of these lands have been located and surveyed, and are among the finest in the State.

roots; the only known casualty being the frosts of April, 1857, cutting down the crop when about two feet high, which afterward sprang up anew, producing from 15 to 20 bushels per acre of first class merchantable wheat, weighing from 63 to 68 pounds per bushel; the usual production being from 25 to 40 bushels per acre, and weighing, per bushel, as high as 72 pounds.

The value of the country west of the Trinity for raising horses, mules, sheep, and horned cattle can not be estimated, except by those who have seen it. The climate being mild affords pasturage for such stock during all the winter months. It is worthy of note that 10,000 barrels of mess beef will be shipped from Jefferson this season, within sixteen miles of the road, proving that packed meat from actual shipments of beef, pork and bacon, made on several occasions heretofore are as merchantable as from any portion of the Union, and which is not now done from want of navigation or other means of transportation to a market.

This road is 800 miles long, and traverses the entire limits of the State of Texas. It forms an important link on the only feasible route to the Pacific, as proved by the surveys of the Federal Government, and of the company, and knowledge of the climate and comparative soil of all other routes which have been explored. A company with such advantages, and so liberally endowed by the State, under proper management, would rapidly succeed in building its road. It is well known that Europe views this as the only feasible route to connect it, by the shortest passage, to China, Japan, and the all important gold districts of Australia. Immense as this trade is now, what must it be by the time this road is completed? A railroad to the Pacific is regarded as a necessity to the commerce of the world. The President in his late annual message to Congress, plainly intimates his preference for this route, and letters from Washington indicate that the leading minds of the country are looking with favor in this direction.

In addition to the advantages which we have enumerated, it may be safely assumed that with proper management the company will acquire, in the shape of donations from private individuals, at least 500,000 acres of valuable lands, sufficient in all probability to realize a sum as large as the present indebtedness of the company.

The company having completed the twenty miles required to save its charter, and having the exclusive control of the route across the State, the people of Texas must of necessity look to this company for the Pacific road. *They have no other alternative.* We therefore appeal to its stockholders to institute such management as will ensure the prosecution of this enterprise with vigor, and to place it in such a condition as will justly entitle it to the confidence of the country. Their own interests should incite them to it, and certainly the State of Texas after such a liberal policy has a right to expect it. With proper management it can be accomplished. Let the stockholders attend to their own interests. Let them elect a directory and other officers, composed of business men, who will devote their energies to this work, and let them be men who will inspire confidence. If they will do this and with the aid of the salutary regulations in relation to railroad companies, adopted at the session of the Legislature just adjourned, success is certain.

The citizens of Marshall should use their

utmost exertions to get the road to this place as speedily as possible. It will be, in one sense, like "bread cast upon the waters." The prosperity which it would bring, for even a few months during the business season, would far more than compensate for the trifling outlay. If the road were completed to this place, we venture to say that for two-thirds of the year not a bale of cotton would be wagoned beyond Marshall. Every property holder, merchant, mechanic, or any other person interested in the prosperity or trade of the place would be warranted in subscribing to the stock of this road, even if he never got a dollar in return.

LITTLE ROCK AND FORT SMITH R. R.

The following is the report of Col. John J. Shoemaker Chief Engineer, to the Officers and Directors of this road, dated Jan. 20th, 1858.

Gentlemen:

It is my duty as Chief Engineer and general contractor of the above named railroad, to make out my first annual report, which I have the honor to lay before you and the community at large.

On the 4th of July last I commenced my travels in this State, for the very purpose of getting the board of directors to take hold in the prosecution of this enterprise, in the finishing of a link of railroad which is so much needed; I say link of railroad from Van Buren to Little Rock, which will be the link connecting the north and south together from Lake Superior to the Gulf of Mexico, a distance of 1325 miles. A road is partly in running order from Fond du Lac to Des Moines, Iowa, and a line has been run from Kansas City to Des Moines, and one from Lawrence, Leavenworth City, and Platte City, to intersect the St. Joseph and Hannibal railroad, which crosses the Kansas City and Gulf railroad at a place in the neighborhood of Buckley, where the Kansas City road runs across at Lawrence, Kansas Territory. From Lawrence city a road is run through the Neosho Valley to all the roads coming from east and north. The Neosho Valley has her termini at a place called Lost Creek, at the head of the neutral lands belonging to the Cherokee Indians. Here also will be the terminus of the southwestern Missouri road, coming from St. Louis by way of Springfield, Mo. A road through the Cherokee nation tapping at Van Buren in connection with our road will be a general thoroughfare from Lake Superior to the Mississippi river, and our road will connect with the Cairo and Fulton railroad, and with the Memphis and Little Rock railroad.

But the great and most important advantage belonging to this road, is its connection with the Pacific road when built to California. The line of the road running on the 35th parallel from its connection with the Memphis and Little Rock road to the western line of the State, connecting at Van Buren and Fort Smith, with Leut. Whipple's survey for a railroad via. Albuquerque to the Pacific.—The immense advantages your road possesses in becoming a part of the great Pacific railroad starting from Memphis, will be obvious and need not be further enlarged upon here. It may, however, be proper to state in this connection, that the route surveyed by Leut. Whipple for a road to the Pacific on the 35th parallel, is beginning to receive the attention that its many great advantages over

all other's merite; and that in a few days such facts and information will be published and laid before the people of the United States, regarding the routes on the 32d and on the 35th parallel, as will show and prove conclusively that the route on the 35th parallel or Whipple route via Albuquerque, is the only practicable route for a railroad to the Pacific.

A glance at the map will show that all the eastern roads even the great northern Pacific railroad, will connect with this main trunk road at Kansas City, or Leavenworth city, wherever her present terminus may be. The distance of 750 miles of the main trunk road is completed and under construction and by the time our link of the Little Rock and Fort Smith road is finished, we hope to run to the most northern point of the United States, as the companies are busy and anxious to do their part.

You will see by following up the line of roads from the north, that we curve in through the Cherokee nation. Congress has donated a grant of land to the States of Missouri and Arkansas for a border road, being unable to cross Boston mountain with a railroad, unless with very heavy expenses and making inclined planes. Therefore it is important that a circuitous route is made in running through the Cherokee nation. And if a company should undertake the task of crossing Boston mountain, and avail themselves of the grant of land, the fertile region of the Cherokee nation will be cut off, a country which abounds in mineral of all kinds, and through which a good road of easy grade can be made with less expense.

The distance from Lost Creek where the southwestern Pacific road taps at running through to Van Buren, is not more than 110 miles, our road is about 150. This 260 miles will complete the great thoroughfare from extreme northern point to the river Mississippi, at Memphis, Helena and Napoleon. Regarding our road from Van Buren to its tapping point, it runs on the north side of the Arkansas river from Van Buren, and the accompanying map will show its bearing in part. The eight months that I have spent in this State in traveling and in the examination of western Arkansas, I have as far as in my power examined minutely regarding its wealth, and fertile soil, and minerals. In the section through which our road will pass they are found of every kind in abundance. The coal beds in the counties of Franklin, Johnson, Sebastian and Crawford, cannot be surpassed in any part of the United States. Iron ore also abounds the best and richest kinds and I have no doubt whenever tested, that 2 tons of ore will make one ton of pig metal. Copper and lead I have found in abundance the forests of pine in Pope county in particular, cannot be excelled in any county in the United States. With these advantages, and the large donation of the best fertile lands, undoubtedly this road will have immense advantages. Our road will be tapped by nearly all the eastern roads in the United States. In the State of Iowa at Des Moines city where the northern central road meets the Rock Island road from Chicago, and the Keokuk road from different points and where the northern Missouri road crosses the St. Joseph and Hannibal railroads, we will then have a chance of sending the produce, minerals and timber all over the eastern and northern regions of the United States; take the lumber for instance from the pine forests of Pope county, a distance no more than 157 to 170 miles to where it reaches the territory of

Kansas, which is destitute of timber, a chance of sending it into Kansas, Missouri, Iowa and Minnesota, where lumber is selling from 5 to 7 dollars per hundred feet, or send it south where it is also in demand.

It will not be many years before the rich mines of western Arkansas will be developed, and the iron masters from the eastern States will embark in business in Arkansas, where coal, iron ore, timber and limestone are in abundance, and at immediate command. In the State of Pennsylvania where we find the largest iron works in the United States, there are but a very few who have these materials at their command. Some of the largest iron works have to get their ore 150 miles by railroad or canal; some of them their coal the same distance, and some their limestone; here as stated before, sites can be had for iron works where all is in abundance, and handy without any transportation of them; materials and lastly labor can be had as cheap in Arkansas as in some of the eastern parts of the United States. Another advantage this road will have, is, it will be the main trunk road from Lost Creek, head of the Cherokee neutral lands, until it taps the Cairo and Fulton road and the Memphis and the Little Rock railroad a distance as said before of 260 miles. When we reach either of these points, Pine Bluff and Napoleon, Charleston and Memphis, St. Louis and iron mountain, Georgia Central and the Galveston and Texas railroads will all be in our reach.

Before I took the contract of building this road and gave these statements to my eastern friends, with the large donation of land granted by Congress, which is 4,000 acres to every mile of railroad we build, we came to the conclusion to undertake the contract. Our estimate are as follows: 4,000 acres of land at the lowest calculation worth 5 dollars per acre is 20,000 dollars per mile. Capt. Hunter who was one of the engineers of this road made his average 16,000 dollars per mile.—Capt. Barney who also made an estimate and surveyed the road, made it 18,000 dollars per mile; both engineers competent calculators, whose statement is before me, rating stock on the road in their calculation included. My calculation is that 18,000 dollars will build and equip the road with making alterations in running a more direct line and picking out a smoother section to run over.—Then if 18,000 dollars will build and stock the road, what have we contractors to lose? Our contract is to grade 25 or finish 10 miles; this we expect to accomplish by time specified, say by the 1st of December 1858. I have only run the distance of 25 miles from Illinois Bayou to the crossing of Point Remove bottom, which is the complement of distance for grading.

But it is the intention of the contractors whom I represent to finish ten miles as we already have contracted for 1,000 tons of iron which will more than finish ten miles. That part of the road will be from the neighborhood of Galley Creek in Pope county, town 7, range 19, which will be between the mountains of Carrion, and on the south by a range of hills which run due east and west, a distance of six miles, where they terminate on the table land bordering on the bottom land of the Arkansas, on the west side of town 7, range 18. The line pursues the valley of White Oak where continuing least it takes a low ridge dividing between the waters of White Oak and those that flow into the Arkansas on the south.

The survey made by me from Illinois Bayou

runs within 100 yards of Russellville and continues to run very near with the preliminary survey made by Capt. Barney. I sometimes run for some distance on his survey, and straightened the road; I think the distance will be some shorter than he made it from Illinois Bayou to the crossing of Point Remove. The Hunter line I leave entire south of my survey, and cross Point Remove creek in a more northerly direction, in order to avoid the large overflow, and the length of tresseling said bottom, and by running in a more northern direction, I find it very practicable and feasible to leave the plantation of Col. Carroll south of me; this will take me in a valley to Plumer's and on to the Cadron. When my report was made ready for publication, I had not heard from the Cherokee nation, and therefore do not know which part of the road to finish next, but it is my opinion which I shall lay before those whom I represent, to work upwards towards Van Buren, in order to open the rich veins of minerals and the large pine forests in Pope county.

When, I say, finish ten miles of the road we can get our iron landed within a short distance from our starting point, so that we have no obstacle thrown in our way on that account.

Gents, I will close my first report. I have the honor to be

Your ob't serv't,

JOHN J. SHOEMAKER,
Chief Engineer and Sup't. of the Little
Rock and Fort Smith railroad Comp'y.

IRON PRODUCTION OF THE UNITED STATES.

The following articles on the iron production of the United States, from the Philadelphia *North American* and the Pottsville *Mining Journal*, embrace many facts and figures of more than usual interest, and which should be pondered and digested by practical business men and the people generally. The statements are thorough and reliable, the most so, says the American, of any before given to the public, being much more accurately made up than the British statements sometimes given in their trade circulars.

There are about 1,100 iron works in the United States, viz:—121 anthracite furnaces, and 500 charcoal and coke, 300 forges and 210 rolling mills.

The furnaces produced in 1856 about 787,958 tons of pig metal from the various ores, to which must be added 6500 tons produced from the ore by the bloomery forges. The entire production of iron in 1856 was nearly 800,000 tons.

The annual change in the amount of iron produced is not so great, on the whole, as was once thought, or as is the case at the present chief centers of production. There were produced,

In 1854.....	713,366 tons.
In 1855.....	705,745 "
In 1856.....	782,958 "

Yet the local fluctuations are very great. The anthracite production during the three years rapidly increased, by the enlargement and better handling of old furnaces and the erection of new ones,

In 1849 it was only.....	107,256 tons.
In 1854 it was.....	307,710 "
In 1855 it was.....	243,105 "
In 1856 it was.....	393,569 "

There was, of course, a proportionate decrease of the manufacture of charcoal iron.

Where this has taken place will appear by the following table:

PRODUCTION OF IRON BY Anthracite Furnaces.			
	1854.	1855.	1856.
In Pennsylvania.....	208,703	255,326	306,966
Out of Pennsylvania.....	99,007	87,779	86,543
Charcoal and Coke Furnaces.			
East Pennsylvania.....	62,734	60,596	51,775
N. W. Pennsylvania.....	78,927	59,388	59,587
S. W. Pennsylvania.....	11,052	18,217	29,400
Charcoal Furnaces.			
East of the Hudson.....	30,420	30,925	27,537
North and West. N. York.	19,197	19,736	18,847
South. N. Y. and N. Jersey.	13,435	7,901	5,683
Maryland.....	35,653	26,309	30,998
N. Western Virginia.....	1,930	2,342	1,467
East and Middle Virginia..	5,880	6,926	5,730
North and South Carolina..	1,890	1,830	1,950
Georgia and Alabama....	3,604	3,652	4,302
Tennessee.....	38,596	30,000	30,100
Missouri.....	5,213	6,000	13,201
West Kentucky.....	5,000	5,000	5,000
East Kentucky.....	22,830	15,580	21,160
S. Ohio (charcoal & coke)..	56,081	47,182	69,605
N. Ohio ".....	8,289	6,025	7,901
Illinois, Indiana, Michigan, Wisconsin & Minnesota.	5,000	5,000	50,000
Total tons.....	713,366	705,745	782,958

There are ten principal centers of the iron manufacture in the United States.

1. Northern New York, once including Vermont, and using the fine primitive ores of the Adirondac mountains. Here are forty bloomeries and three anthracite furnaces.

2. The Highlands, a narrow belt extending through Berkshire, Massachusetts, into southern Vermont, and through Northern New Jersey into Pennsylvania, containing forty-four charcoal and twenty-two anthracite furnaces and sixty-forges, using hematite and magnetic ores.

3. Eastern Pennsylvania and north-eastern Maryland, with ninety-eight anthracite furnaces, one hundred and three charcoal furnaces, and one hundred and seventeen forges; none of which last, however, produce iron from the ore. This great iron region is itself divisible into distinct smaller areas, some of them using magnetic, some hematite and some fossil ores.

4. North-western Virginia and South-western Pennsylvania is a distinct region on the eastern outcrop of the lower coal measures, with forty-two charcoal furnaces, and two or three forges, and using carbonate of iron. It includes the Cambria iron works, which account for its apparent growth.

5. North-western Pennsylvania and north-eastern Ohio, with sixty-six furnaces, using the ores of the North-western outcrop of the lower coal measures. The charcoal furnaces of this region are all going out, and the coke and raw bituminous furnaces are increasing in number, size and efficiency. All the forging of this region is done by the rolling mills at Pittsburg.

6. The Hanging Rock, or Ironton region, crosses the Ohio River as a belt of charcoal furnaces about fifteen miles wide and one hundred long; forty-five in number on the Ohio side, and seventeen on the Kentucky side. Its ores are all from the lower coal measures, and at its northern end it is beginning to use stone coal for fuel.

7. The old manufacturing region of middle and eastern Virginia is a prolongation southward of the eastern Pennsylvania with the same ores, but using charcoal exclusively as a fuel. East of the Blue Ridge are sixteen furnaces, only one of which remains in blast, and west of the Blue Ridge thirty. There are thirty-five forges.

8. North-eastern Tennessee and North-western North Carolina have nine furnaces

and forty-one bloomery forges in a compact area. Along the base of the Cumberland Mountains, five furnaces and four forges use the dyestone, fossil, upper silurian ore. In the south-western corner of North Carolina are five forges, and through the middle of the State runs a belt of five furnaces and twenty-seven forges. This whole country possesses incalculable resources for iron making, and must become at some distant day one of the great centers.

9. In western Tennessee and Kentucky, around Clarksville and Eddyville, lies the principal, and, at present, only important iron region of the far West. It contains forty-five furnaces and some forges.

10. In Missouri a beginning has been made with seven furnaces, which must develop into a great iron making region around the iron Mountain and Pilot Knob, when fed by coals from Western Missouri and Kansas.

The Lake Superior iron region has been opened as a mining region only within two or three years, though it is worked with great success at various points near the copper mines, in Michigan, and on the western shore in Minnesota. Most of the ore is shipped to Detroit and Cleveland, for the use of the rolling Mills of the West. The total production of these ores was probably 15,000 tons in 1857. This at no distant day will be a principal iron making region.

Tabulating these regions on the scale of their importance, we have—

	Tons.
1. East Penn. and Maryland, charcoal 87,773 anthracite 341,928.....	429,701
2. Ironton Region, S. Ohio.....	91,765
3. Highland Belt.....	70,672
4. Pittsburg Region.....	67,488
5. Clarksville and Eddyville Region.....	33,000
6. Adirondac Region.....	34,464
7. Monongahela Region.....	30,867
8. Missouri Region.....	13,201
9. East Tennessee and Carolina Region.....	6,800
10. Virginia.....	5,730
Total.....	782,958

Bloomery Forges are small open blast furnaces, or very large smith fires closed in to hold a quarter of a ton of rich ore, which when smelted is hooked out in the form of a ball of malleable iron and hammered round or flat under a tilt hammer. All the forges are adjuncts to the blast furnaces, treating their pig iron in the same manner as if it were so much ore, and preparing it for the rolling mill. It is a great geographical feature of the manufacture that the forges are to be found almost exclusively east of the Allegheny Mountains. The geological reason for which is, that here alone are found the magnetic, primary, or high per cent. ores. Lake Superior and Missouri are the only western forge regions. The West once had many forges for blooming pig iron, but these have all been abandoned, and that work is now done by the puddling furnaces, squeezers and muck rolls of the rolling mills. There is a third division of forges which use either trip or steam hammers for turning bloomed and rolled iron into various shapes for mechanical purposes—engine cranks and shafts, car axles, &c.

Rolling Mills (commonly with nail factories attached) are divided into railroad and merchant mills. The principal railroad mills in the United States are given in the following table, with their make in 1856:

Bay State, Boston.....	17,571
Rensselaer, Troy.....	13,512
Trenton, New Jersey.....	about 13,000
Phoenix, Pennsylvania.....	18,592
Pottsville.....	3,021
Lackawanna.....	11,328
Rough and Ready, Danville, Pa.....	5,259
Montour.....	17,538
Safe Harbor, Lancaster County, Pa.....	37,447

Mt. Savage, Maryland.....	7,059
Cambria, Pa.....	7,623
Brady's Bend, W. Pa.....	12,206
Washington, Wheeling, Va.....	1,335
McNickle, Covington, Ky.....	1,976
Railroad Mill, Cleveland, Ohio.....	1,800
Newburg Mill, ".....	1,000
Wyandott, near Detroit.....	6,000

Total.....147,507

The Fairmont, at Philadelphia, has been recently adapted to rolling railroad iron, and the Palo Alto, at Pottsville, rolled about 1000 tons in 1856. The Newburg mill commenced making rails late in 1857. Most of these mills are now stopped, and a number to be erected in the West, at Indianapolis, Chicago, St. Louis, &c., will be obliged to wait for better times. The western mills chiefly re-rolled old rails. The extension of this business in the past four years, can be seen from the following figures:

	R. R. Iron made.	Imported.	Consumed.
1853.....	105,000 tons.	298,995	403,995
1854.....	121,000	285,866	406,866
1855.....	134,000	127,915	261,915
1856.....	147,507	155,995	303,502

The Pottsville Mining Journal appends the following pertinent comments:

In connection with the above statement which is from the Philadelphia *North American*, we will take occasion to state that there was not a single Rolling Mill in the United States erected for the turning out of Railroad Iron—when the Tariff of 1842 was passed—and in less than four years after its passage, a sufficient number had been erected to turn out sufficient Railroad Iron to lay down a mile a day.

We also appended a statement of the value of Pig Iron produced in this country for a series of years, from 1824 to 1852, together with the value of iron imported in the same years, together with the average prices in the New York Market under different Tariffs. This is an important statement, showing the effect of Home Protection to this branch of Industry, and also the want of it on the part of the Government.

	DOMESTIC PROCT. Value.	FOR'N IMPORT'N. Value.	Average price of Pig Iron in N. Y. Market.
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WITHOUT PROTECTION.

1824.....	\$2,984,250	\$4,314,498	\$39 79
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WITH PROTECTION.

1825.....	4,160,156	5,622,081	46 87
1835.....	8,331,894	8,388,901	34 23
1836.....	10,170,144	12,361,534	39 57
1837.....	11,660,156	11,576,277	42 90

REDUCTION OF 30 AND 40 PER CENT. ANNUALLY IN THE DUTY UNDER THE COMPROMISE.

1838.....	10,041,650	6,955,024	35 08
1839.....	10,170,144	12,051,668	33 83
1840.....	10,073,700	6,750,699	31 08

DUTIES REDUCED ONE-HALF SINCE 1832.

1841.....	8,234,950	8,914,425	30 22
1842.....	6,260,600	6,988,965	27 22

TARIFF OF 1842 TOOK EFFECT IN 1843.

1843.....	8,755,463	1,903,858	24 07
1844.....	12,769,167	5,227,484	25 66
1845.....	20,591,375	8,294,878	32 62
1846.....	23,271,300	7,835,832	30 42
1847.....	23,568,000	8,781,252	29 46
1848.....	23,450,000	12,536,854	29 31

TARIFF OF 1846 TOOK EFFECT IN 1848.

1849.....	16,135,167	13,831,823	
1850.....	12,675,926	16,333,145	
1851.....	11,124,038	17,306,700	
1852.....	11,115,000	18,957,993	

We invite particular attention to the above figures. The first Protective Tariff was passed May 22, 1824, which put a duty of \$10 per ton on Pig Metal—on Bar Iron \$30—and on other kinds \$18 a ton. Under the operation of this bill, (which was increased in 1828 a shade higher, and lowered again in

1832 to the rates of 1824), the product of iron in this country annually increased from the value of \$2,984,250 to \$11,663,156 in 1837 when the duty was \$9 23 on Pig, \$26 on Bar and \$16 84 on other kinds. After 1838, the duties began to decline rapidly under the operations of the Compromise Bill, until they finally fell to 20 per cent. in June, 1842, and the value of the annual product of American Iron also fell down to \$6,266,000, less than the product of 1831, which was \$6,685,000. In 1842, the Bill known as the Tariff of 1842 was passed, and took effect in 1843, when the value of the annual product began to increase, and ran up in value from \$6,266,000 in 1842 to \$22,568,000 in 1847—a period of five years only, under the Protective policy. In 1846 the Tariff of 1842 was repealed and the duties reduced under the Free Trade system to 30 per cent., and the American production began to decline annually until it ran down to the value of only \$11,115,000 in 1852, less than the annual product of the year 1837, although the population of the country had increased in the intervening period of sixteen years, at least eight million souls.

Reader, now look at the value of Foreign importations, and you will observe that when the American production declined, the importations increased, thus destroying our own industry, labor and capital.

But the most important feature remains to be noticed yet—and that is, the prices of Pig Iron during the periods of Protection and Free Trade. In 1841 and 1842, when the duty on Foreign Iron was the lowest, about 20 per cent. under the Free Trade system Iron was higher on the average, than it was under the high Protective Policy which prevailed in the years 1843, '44, '45, '46 and 1847. The price of Pig metal was also higher in the following years under a duty of 30 per cent., than it was at any time under the high duties of the Tariff of 1842:

It was in 1833.....	\$31 81	in the New York market.
" 1854.....	38 56	" " "
" 1855.....	31 12	" " "
" 1856.....	32 58	" " "
" 1857.....	32 00	" " "

The average price in the above years is considerably higher than the five years under the Protective Tariff of 1842, which proves conclusively that the assertion made by the friends of Free Trade, that by increasing the duties for Protection to American industry the consumers are taxed to the amount of the increase, is not true.

If the laboring classes of the country will cry Democracy and vote for Free Trade—and thus vote the bread out of their own mouths, they must take the consequences, and submit with as good a grace as possible to the starvation wages of the old country. With Free Trade, our Factories and Workshops must close—or labor must be reduced to the European standard, in order to compete with the price of European goods in our market. The large mass of the laboring classes support Free Trade, and the lazy Pot-House Politicians, against the Business Community who give them employment by opening mines, building factories, machine and work shops, &c., and now they are reaping their reward in return for their votes.

If all the suffering could fall on those only who are guilty of such a suicidal course, there would be but little sympathy for them—but unfortunately the innocent have to suffer with the guilty.

The above statements are taken from the Official Records furnished to Congress from the Treasury Department.

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Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

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MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

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Cincinnati, March 5, 1856.

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.... MARCH 18, 1858.

Railroad Record

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CONTRACTORS.—Contractors will find notice of the letting of thirty-two miles of the Cincinnati and Mackinaw R. R. in another column. The Engineers office is located at Greenville Dark County, where full plans profiles and specifications can be seen and examined.

THE MAILS.—The Postoffice will do us the credit of believing that we do not often complain. But some irregularities in the transportation of mail matter have come to our knowledge of so outrageous a character, that we deem it our duty to bring them to the knowledge of the Department. The mails between Cincinnati and New York, are frequently delayed beyond all power of endurance. Two traveling days should be ample time to convey the mails from Cincinnati to New York, or to Philadelphia. On the 24th of February we wrote a letter to New York, and mailed it that evening. It was received in New York on March 5. It took nine days to reach its destination. A letter mailed on the 1st of March, reached Philadelphia on the 5th. Now these delays often result in serious personal inconvenience, and it is the duty of the Department to ferret out the causes. If the roads upon which the eastern mails are carried, are unable, from any cause whatever to make connection, the Department should require such changes in their running time as to ensure connections in the mail trains. And if then they fail, they should forfeit their contract. It would be far better for business houses to know that letters invariably take three days to reach a certain city, and that they are sure to be carried in that time, than that expecting to go in two days, they may take ten.

SILVER MINING—THE WANT OF SILVER—THE MINES OF ARIZONA.

The era of gold and silver mining has commenced. After the first conquest of Mexico and Peru by the Spaniards, mining of the precious metals produced such immense quantities, that the whole commerce of the world was changed. The value of money was changed. The price of commodities became greatly embarrassed; and however evil may have been its social effects on Spain and Portugal, it is certain the world received a social and commercial impetus which was permanent and powerful. We seem now, in the midst of another era, very similar in its character and effects. The mines of Mexico and Peru had become apparently exhausted. The coin of exchange was becoming rapidly substituted by paper, when, all at once, the fountains of gold and silver seemed broken up, and the streams to run down gold. First California was the new elysium of gold hunters, and fifty millions per annum was poured into the country. Then came Australia, and fifty millions more per annum were added to the stream! Now we hear of the silver mines of Arizona (Gadsden's Purchase), which, if accounts are correct, are likely to rival the gold of California or Australia. This is so novel, and so interesting a subject, that we propose to analyze a little the relations which gold and silver bear to each other and to the wants of commerce.

1. Let us look at the supply, and chiefly the American sources. According to Humboldt, the entire supply of precious metals from America down to 1803, was as follows:

	Dollars a year—Average.
1492 to 1500.....	\$250,000
1500 to 1545.....	3,000,000
1545 to 1600.....	11,000,000
1600 to 1700.....	16,000,000
1700 to 1750.....	22,500,000
1750 to 1803.....	35,300,000

Down to 1803, there had been drawn from the mines of America, the enormous sum of seven thousand three hundred millions of dollars!

At the commencement of the present century, the annual produce of silver and gold in Mexico and South America, was about forty millions per annum.

Since that period, the produce of American silver mines has rapidly diminished. The following is the return made by the British Consuls:

From 1780 to 1809 per annum.....	\$30,000,000
From 1810 to 1829.....	15,000,000

From 1790 to 1830, the produce of silver in Mexico and South America was nine hundred millions of dollars.

About 1828–1830, the Mexican and South American silver mines were rapidly stimulated by the British Mining Companies; but, this fell off in a few years, and within the last ten years, the produce of silver mines has been comparatively small. The silver production of Europe is very small, and need scarcely be taken into account.

2. Let us now look at the *changed relations of silver and gold*. We may assume the annual production of gold in America (including Mexico and Brazil), at about \$60,000,000 per annum; while the silver production is not now over \$15,000,000. So that now the American supply of gold is about *four times* as much as that of silver. But how was it formerly? About half a century since, the supply of gold in America was to silver only as 1 to 46! The supply of silver is, *relatively*, less than in 1800, by *one hundred and eighty times*! In other words, if 15 ounces of silver was then worth one ounce of gold, *one-twelfth of an ounce* is worth an ounce of gold now!! That is, if America only is considered, and the previous supply is left out of view. But the supply from Australia has made almost the same difference, throughout the world. Whatever the existent stock of gold or silver may have been, it is evident that the relation of their respective quantities is rapidly changing throughout the world. The *inferences* from this state of fact are obvious and inevitable.

It is palpable, 1st, that the *value* of silver has risen relatively enormously; and 2d, that there never was a time when the *same capital and labor in silver mines could be so productive as now*. Silver considered in relation to the *cost of production* and the amount of *demand*, is precisely in the same predicament as corn or any staple article. If it has become scarce in market, relatively to other things, then, at the same cost, the price rises, and the profits of production are greater.

In corroboration of the above view of the relations of gold and silver, we give the conclusive evidence of the United States Mint.

The coinage of the United States Mint at Philadelphia, at different periods, was as follows:

	Gold.	Silver.
Coinage from 1793 to 1847...	\$42,600,000	\$62,747,400
“ “ 1847 to 1857...	260,100,000	22,366,000
Proportion from 1793 to 1847.....	2 to 3	
“ “ 1847 to 1857.....	11 to 1	

This is a most prodigious change, and indicates, beyond a doubt, the truth in the proportion of precious metals existent in the country.

3. The manifest *need* of silver, at this time, brings us to the inquiry, whether there are really any means of supplying the demand? If the supply of Mexico and Peru furnished *forty millions* per annum half a century since, and now only fifteen, why should they not supply the same quantity? Have they been exhausted? Or, is the diminution owing to other causes? It appears, beyond a doubt, that the Mexican mines were not abandoned or diminished from exhaustion; but, from social and political causes. The principal of these were: 1. The *ignorance* arising from their social defects. 2. Their *weakness*, which caused their more

northern mines to be abandoned from positive dread of the Indians. 3. But, perhaps, the greatest of all was the instability and mal-administration of government, which left population without protection, and liable to continual vicissitudes. For example, when Mexico and the South American States came into a revolutionary state, and finally independent, mining continually diminished.

We conclude, then, that when government becomes secure, and labor is protected, there is a fair and open field for successful mining in Mexico. If mining was ever productive there, it must be ten times more so now. We have shown that silver now is worth a hundred fold *in proportion to the same cost* that it was half a century ago.

Turning now to the existent prospects, we find that a very rich mining district has been acquired by the United States, which is called the Gadsden Purchase, or Arizona. The first company actually commenced is the Sonora Silver Mining Company, of which we have heretofore given some account. That Company is actually receiving silver from there in return for its ore, and it is supposed that the product of silver there will be immense.

Another company has been formed to work the Santa Rita Mines in the same region. There is every reason, as we have above shown, to suppose it may be exceedingly profitable.

McCullough gives three reasons for the future profit of mining in Mexico, which the facts we have given fully confirm.

1. The abundance of silver ore, which is far greater than in any part of Europe.

2. The former success of mining in Mexico under a system exceedingly rude and inexpensive.

3. The probability of continued peace in Europe, and consequent abundance of capital.

The great and ultimate cause of profit in silver mining will be found in, first, the great need of silver; and second, the ample security of property derived from the United States Government.

We conclude with the following paragraph from the prospectus of the Santa Rita Company, which will explain the character of its mines:

The "Salero" is a regular vein of the Sulphuret of Silver and Copper, two and a half feet wide at the surface, and outcrops for a distance of one and a half miles in a north and south direction. The old shaft has been cleaned out to the depth of eighty feet by the engineers of the Sonora Exploring and Mining Company. It is held by indisputable titles derived from this Company. The other veins in the same mountains partake of the same general character of ores, and are parallel to the Salero. They yielded during Spanish rule from six to twelve marcs, (\$51 to \$102) to the carga (300 lbs.) of ore.

The Santa Rita Mountains, in which these

mines are situated, border in a north and south direction the valley of the Santa Cruz River. The summits of the mountains are covered with pine, and the valleys are filled with cottonwood, walnut, and oak. The slopes of the mountains and the valleys of the streams are covered with grass, which affords excellent pasturage. The soil in the immediate vicinity of the streams is capable of the highest cultivation, and produces all the fruits known to a southern clime—grapes, wheat, corn and cotton. Its climate is declared by Ward, Wilson, Gray and others, to be as "attractive as its mineral riches." Its pure mountain air is bracing and salubrious.

THE ERIE R. R.—ITS PRACTICAL MANAGEMENT.

The practical and financial management of the Erie R. R. has heretofore been a subject of so much puffing in the New York Dailies that the world would have long ago been convinced that its management was perfect, had not the same Dailies chronicled changes of management too frequent to warrant the assumption of its entire perfection. We propose to give a little chapter of our own private experience and leave our readers and railroad men generally to judge whether the enormous salary of its Superintendent is well earned.

We had occasion a few days ago to go from Dunkirk to Olean and return. We took the 4.55 A. M. train and were anxious to return on the New York Express which should pass Olean at 12.02 M. On the way to Olean we had *two first class passenger cars*. The one in which we sat, was occupied by six passengers the other by about the same number. *One seat only in every ten* was occupied. The Company hauled nearly twenty tons of cars to convey less than twenty persons.

On the return trip we were at the depot in readiness for the 12.02 M. Express train, but ascertained then that it was two hours behind time, and could not possibly make connection at Dunkirk. This state of things on the New York Express trains we were told was the rule and not the exception. Not wishing to wait at Dunkirk, we decided to remain at Olean till the 6 P. M. Way Train. This is the only train over the road from noon till near midnight; and it is the shabbiest apology for a way train that we ever saw. On the evening in question it consisted of some ten or twelve freight cars, and a calaboose occupied by the Brakemen. The floor was covered over an inch deep with hemlock sawdust, and the fumes of tobacco were very distinctly visible. And this we were told was the regular way train—the only means of accommodation for the local travel of the road. Ladies as well as gentlemen had to put up with accommodations worse than are usually afforded an emigrant train.

For a seat in this miserable apology for a passenger train, we were charged at the rate

of three cents per mile. This train moves at the rate of *thirteen miles per hour only*.

The justice of the accommodations and charges on this way train as compared with the through Express trains, will be evident by the following comparison:

EXPRESS TRAINS.

Rate of charge per mile..... 2½ cents.
Rate of speed per hour..... 25 miles.
Accommodations..... 1st Class passenger cars.

WAY TRAIN.

Rate of charge per mile..... 3 cents.
Rate of speed per hour..... 13 miles.
Accommodations..... Calaboose, with hemlock sawdust and tobacco fumes.

Were the Erie Road independent of its local travel; were it a rich monopoly that could afford to trifle with the wants of the community, and were it managed by men of common sense, and ordinary business tact, they would hardly venture so far to outrage the community they should accommodate, and on which they must still depend for the great proportion of their business. For it is a fact that railroads must, in the main, be made profitable by the *local trade* of the country through which they pass. Whether it is wise, then, in the Erie Road to pursue such a course as will repress its local business and reduce it to the minimum, is a question which its expensive management undoubtedly feels itself competent to decide.

The effect of its management on its pecuniary position may be readily perceived from the following extracts from its various reports:

	Total Cost.	Total Debt & Stock.
1852.....	\$24,028,558 20	\$23,453,534 50
1853.....	27,551,205 71	27,093,913 62
1854.....	31,222,834 21	32,558,986 47
1855.....	33,439,431 40	35,150,628 69
1856.....	33,938,254 09	35,882,066 91
1857.....	Circular of Aug. 17.....	38,025,420 00
".....	" Sep. 30.....	37,011,309 00
".....	Exhibit, Sep. 30.....	39,081,463 46

The steady increase of the stock and debts of the road from the time of its completion in the report of 1852 to its report in 1856, needs no comment. The total debt and stock is now one-half more than it was when the road was first put in running order. It is an enormous increase. The three statements of Mr. Moran, bearing date of August 17, Sep. 30, and Sep. 30, are irreconcilable, and certainly show Mr. Moran to be possessed either of a very bad memory, or too little aptitude for figures for a *great financier*. That he is *not a great superintendent*, his practical management of the road will certainly show.

The Erie Railroad is a great corporation, or rather, we should say a corporation controlling a great work—a road 459 miles long, from Dunkirk to New York. Its importance to the country through which it passes is inestimable. As a through line it has many rivals. Its grades and curves, and its gauge render it peculiarly liable to competition on its *through* business. Its true policy therefore, like that of any other road, should be to foster and encourage its local business, on which it can never encounter opposition. To give the people on its line every facility for

comfortable travel, and to add to its local in preference to its through trade. In no other way can it become a profitable work. It should also adopt some system of financiering which will put a stop to the constant and ruinous increase of its stock and debts. If these continue to increase as they have heretofore done, at the rate of from half a million to two millions a year, it is very evident that the road must soon change its management under the direction of the courts. When this event takes place, Wall Street will lose a football and Mr. Moran a large salary.

LIFE INSURANCE.

In no community so much as the United States, is this most valuable and important institution so far underrated, and so little understood. It is surprising in such a progressive and thorough going business community as ours, that so little importance has been attached to this subject. The truth is that nine men out of every ten, have either never given the subject scarcely a thought, or they are totally ignorant of the very principles and objects of one of the most important, if not *THE* most important theory and institution ever brought into successful operation. At least nine-tenths of our community derive their income and support from professional or other personal pursuits, which are entirely dependent upon their health and lives—and as life is of all things the most uncertain, a family nurtured in all care and tenderness, enjoying every comfort and wish, may, as is frequently the case, by the sudden death either from sickness or accident of their natural protector, be reduced to a state of almost utter destitution, privation, and want. The fact is, we live too much for the present without a thought for the future, either of ourselves or those that are dependent upon us. We devote every moment almost of our lives to business or pleasure, and think we cannot find time to investigate or spare any means to devote to this subject. How many almost daily warnings have we of the importance of it. In the great financial crisis that is just passing over us, how many men crushed by the weight of their reverses have gone to their long home, leaving behind them a load of debts, and their families helpless and reduced to almost utter destitution and want, or dependant upon the charity of strangers. And then on the other hand how many are there of us *now*, who, if we were called from hence, would leave our families in a little better condition. At the mere thought of such a calamity attaching to the objects of our best affections and tenderest care, every well constituted mind must shudder, and should feel it a solemn obligation to avert it by making the best provision for them that his circumstances will permit, and we think in no way can this be so effectually and easi-

ly accomplished as by a policy of Life Insurance. Another important feature in Life Insurance and very apropos at the present time is insuring for the benefit of a creditor, or to secure a friendly endorser, or when a creditor wishes to fully secure his claim he can do so beyond a doubt by effecting an Insurance on the life of his debtor. The most important and most desirable object *then* is to select a fully responsible and reliable Company, and one in which to secure the greatest amount of insurance for the smallest amount of present outlay. From the plan of business tables of rate and reliability of the company, we would invite the attention of our readers to the British Commercial Insurance Co. of London and New York. This Company has been in successful operation since 1820 (nearly thirty-eight years) it commenced with a subscribed capital of \$3,000,000, and by a long course of judicious management, has nearly doubled its capital, or has accumulated in all upwards of \$5,500,000, yet during its existence it has paid losses of more than *four millions of dollars*, a large amount of which has been paid to those in our midst. What a vast amount of suffering and distress has that four millions of dollars averted? What an army of widows has it protected and amply provided for, and orphans has it educated? What an amount of otherwise worthless debts has it paid? Who can look at this and not say that Life Insurance is one of the most important and noble institutions ever put into operation.

This company has an influential Board of Referees and managers in New York, comprising some of the most distinguished and well known merchants, and it is well known for its prompt settlement of losses. Mr. Geo. M. Knevit, 65 Wall St., is the actuary, and Mr. Solon McElroy, No 117 Walnut St. Cincinnati, is the *General Western Agent*, of whom pamphlets containing tables of rates, and any other information can be obtained, or applications for insurance, or for agencies, will be received. We will also add that in England and France where a much larger proportion of persons are Insured, suits brought against Railroad Companies, for damages for the death of Individuals caused by accident or otherwise, are rare.

☞ The overland mail from San Antonio arrived on the 8th inst., in 29 days. Considering the length of the route, the longest uninterrupted line in the United States, if not in the world, it is worthy of remark that the contractors never failed to make their schedule time since the second mail was run. They have lost animals, wagons and men, fought Indians and conquered the desert, but they always bring their mails along inside of time. This shows the right kind of energy.—*San Diego Herald*.

☞ The California steamer brings \$1,279,000 in gold, and the general accounts are favorable from the mines.

Railroads.

EASTERN TEXAS RAILROAD CO.

Below we give the act to incorporate a company under this name to construct a railroad on the line of the Mexican Gulf and Henderson Railroad, left unoccupied by the failure of that company to comply with the requirements of its charter.

AN ACT TO INCORPORATE THE EASTERN TEXAS RAILROAD COMPANY.

SECTION 1. *Be it Enacted by the Legislature of the State of Texas*, That Michael G. Bright, Thomas B. Lincoln, and Samuel H. Witmer, and their associates, or a majority of them, be, and are hereby created and established a body corporate and politic, under the name of the "Eastern Texas Railroad Company," with capacity in said corporate name to make contracts, to have succession, and a common seal, to make by-laws for the government and regulation of the Company, to sue and be sued, to plead and be impleaded, to grant and receive, and generally to do and perform all such acts as may be necessary or proper for, or incidental to, the fulfillment of its obligations or maintenance of its rights under this act, and in accordance with the Constitution of the State of Texas.

SEC. 2. That said Company be, and are hereby invested with the rights of locating, constructing, owning and maintaining a Railway, commencing at Galveston Bay, or at any point between said Bay and tide water of Sabine Bay, and thence running by such course and to such point at the town of Henderson, running through the town of Nacogdoches, as said Company may deem most expedient and suitable; *Provided*, That if when this Road is completed to the town of Nacogdoches, the Galveston, Houston and Henderson Railroad shall have extended beyond that place, on its line to Henderson, then, and in that case, the said Eastern Texas Railroad shall forfeit all right to continue their Road beyond Nacogdoches, except for the purpose of connecting with said Galveston, Houston, and Henderson Railroad at the nearest practicable point.

SEC. 3. That the parties named in this Act, or a majority of them, with such as may be associated with them, are hereby appointed commissioners and invested with the rights of forming and organizing said Company, and of exercising the power of Directors, until Directors are chosen, which shall be within six months from the passage of this Act, when the powers of the Commissioners shall cease.

SEC. 4. That the capital stock of said Company shall be seven millions five hundred thousand dollars, divided into one hundred and fifty thousand shares, of fifty dollars each, and each share entitling the owner thereof, to one vote in person, or by written proxy, at all meetings of the stockholders, and the shares shall be deemed personal estate, and shall be transferable by any conveyance in writing, recorded on the books of the Company, kept for that purpose at such place on the line of road as the Directors may appoint.

SEC. 5. That the affairs and business of said Company shall be conducted and managed by a Board of Directors, not less than five in number, who shall be elected at the general meeting of the stockholders, to be held annually; they shall hold their offices for the period of twelve months, and until their successors are elected. The time for the first election shall be appointed by the corporation named in this act, of which due and reasonable notice shall be given; and should the stockholders fail annually thereafter to meet and elect Directors, as aforesaid, the Directors in office shall appoint a day for a special election, giving like notice. No person shall be eligible as a Director, unless he be the owner of ten shares of the capital stock. The said Board shall elect a President from their number, fill vacancies, appoint a Treasurer and Secretary and such officers as they may deem necessary, and require security for the faithful performance of their duties. Also to prescribe the time for the payment of installments or assessments upon the stock, and the amount of such installments or assessments, to declare the forfeiture of such stock for nonpayment, and to do, or cause to be done, all other acts or things which they may deem necessary or proper in conducting the business of said Company. A majority of said Board of Directors shall constitute a Board for doing business. All instruments in writing executed by the President and Treasurer, under the seal of the Company, with the consent of the Board of Directors, shall be valid and binding, provided that such conveyance and contract be made in conformity to the general Railroad Laws now existing or hereafter to be enacted.

SEC. 6. That the Directors shall have the power to dispose of the capital stock in such a manner, and on such terms as they may deem best for the interests of the Company, and any agreement in writing, whereby any person may become a subscriber to the capital stock of said Company, may be enforced against him according to its terms; *Provided*, That this Company shall not issue any stock for less than its face value.

SEC. 7. That said Company shall have power to borrow money on their bonds or notes at such rate as the Directors may deem expedient, provided, however that nothing in this act shall be so construed as to confer banking privileges of any kind.

Sec. 8. That it shall be the duty of said Company, whenever any State or county road now established, shall be crossed by said railroad, to make and keep in repair good and sufficient causeways at such crossings, and in all cases where any person shall own land on both sides of the railway, and there shall be no other convenient access from one point to the other, such owner shall have the right of passing free of cost, at all reasonable times crossing said railway, and if said railway shall cross any navigable stream, it shall not interfere with the navigation of the same.

Sec. 9. That said Company shall have the right to charge and receive such rates and prices for the transportation of passengers and freight, as shall not exceed five cents per mile for passengers, and for freights not exceeding fifty cents per hundred pounds for every hundred miles the same may be carried.

Sec. 10. That it shall be lawful for said Company to enter upon and hold in fee, for the purpose of locating, constructing, and maintaining said railway, and as a right of way, any of the public domain through which said road may pass, not to exceed two hundred feet in width, and so much in addition thereto at the proper points on the line of said road as may be necessary for depots and other public buildings, and any other lands or lots, the property of individuals, through which said road may pass, may be entered upon, taken possession of, and held in fee, for the purpose herein specified, by said Company, in the manner provided for in this Act; and that said Company, before entering upon and taking possession of land, except public land, for the purposes specified in the next preceding section shall agree with and pay the owner thereof the value of the real estate thus taken, together with the value of any other property that may be taken or destroyed by the seizure of said land, and together with the damages that may be done to the real estate or property of by said Company; *Provided*, That if said Company and owner or owners can not agree upon the said value and damages, it shall be the duty of said Company to state in writing the real estate and property sought to be condemned, the name of the owner, and the object for which the same is sought to be condemned, and file the same with the Chief Justice of the county in which said property is situated, and thereupon the Chief Justice shall appoint three disinterested free holders of said county, as special Commissioners, to assess said value and damages, giving preference to those that may be agreed upon between said Company and said owner, and it shall be the duty of said Commissioners when sworn by the Chief Justice, to assess said value and damages, taking as the rule of assessments, the actual value of the property so condemned together with the actual damages done the real estate and property of said owner by the running of said railroad, and by the condemning of said real estate and property for the use aforesaid, and the said Commissioners shall proceed thus: they shall appoint a day and place at the earliest practicable period for hearing said parties: they shall on the day, and at the place appointed, fully hear said parties; they shall, if they choose, examine the land and property sought to be condemned, and then under oath assess, by the rule before mentioned, the said value and damages, it being the duty of said Company to give to the owner five days written notice before the sitting of said Commissioners: *Provided*, That either party if dissatisfied with the decision of said Commissioners, shall have the right to file a petition in the District Court as in ordinary cases: *Provided*, That when said Company shall institute a suit in the District Court, in accordance with these provisions the award or judgment of said Commissioners, and the judgment that may be rendered in the District Court, shall be a special lien on the said road-bed, track, and franchise of said Company, until the said award or judgment shall be discharged.

Sec. 11. That if the said Commissioners, in a proceeding before them, as provided for in the next preceding section, shall adjudge the Company to pay greater damages for the land taken, and the injury resulting therefrom, then said Company shall pay all costs; and the same rule shall determine the costs in the District Court or before said Commissioners recover the same or a less amount of damages than was offered by the Company, then he or she shall pay all the costs.

Sec. 12. That there be granted to said Company, all the grants, provisions, and privileges of an act entitled "An Act to encourage the construction of Railroads in Texas by donations of lands," approved January 30, 1854, and all the grants, provisions, and privileges of an act entitled "An Act to provide for the investment of the special school fund in the bonds of Railroad Companies incorporated by this State," passed August 13, 1856, in conformity to the provisions of said laws, and such other general laws of this State, on the subject, as are now or may hereafter be in force.

Sec. 13. That the said Michael G. Bright, Thomas B. Lincoln, Samuel H. Witmer, and associates, shall, within six months after the passage of this Act, deposit in the Treasury of the State of Texas, fifty thousand dollars, either in gold coin, United States Treasury notes, or United States Bonds, at the option of said Corporators, subject to the sole control of the Governor, and provided that when the Company shall have graded twenty-five miles of said road, the said deposit shall be returned to said Company, otherwise to be forfeited to the State of Texas, for the benefit of the Special School fund of the State, and that no rights shall rest under this act of incorporation, until said deposit is made.

Sec. 14. That the said Company shall have completed on or before the first day of April, 1859, at least twenty-five miles of said Railroad, and that there be twenty-five thereof completed each year thereafter, until the whole be completed, and that no certificates of stock

shall be issued until fifty miles of said railroad be finished and in complete running order; and, that in case said Company shall fail to construct twenty-five miles of said road by the said first day of April, 1859, that such failure shall operate as a forfeiture of the Charter hereby granted.

Sec. 15. That should said parties and associates fail to make said deposit within six months from the passage of this act, then shall any five or more citizens of the State of Texas, selected or accepted by the Governor of the State, be authorized to organize and carry out the provisions of this Act, provided they comply with the obligations imposed upon the first Company by the 13th Section of this Act, the same as though they had been originally named as the corporators, and that the time herein named for having the first twenty-five miles completed, be extended six months.

Sec. 16. That the said Michael G. Bright, Thos. B. Lincoln, Samuel H. Witmer, and associates, shall pay to the order of Messrs. Ferguson, Alexander & Co., and other creditors of the Mexican Gulf and Henderson Railroad Company in Texas, not exceeding three thousand dollars debts contracted by the agent of said Company for labor and supplies.

Sec. 17. That books for subscription to the capital stock of said Railroad Company, shall be opened within sixty days from the time the deposit is made, required in the 13th Section of this Act, at the city of Marshall, and the towns of Henderson, Nacogdoches, Woodville, and Beaumont, on due notice of time and place being given by publication in some newspaper having general circulation in the several counties through which said Railroad is to be located, and that an instalment of not less than five per cent. shall be paid at the time of subscribing.

Sec. 18. That said Company shall have the right to commence the construction of said road at any point on their line that they may select; *Provided*, it be at tide water; and provided, that the Company shall designate the place of beginning within six months from the passage of this Act; and further provided, that the Southern terminus of said road shall be finally fixed at some point on the Gulf within six months after the passage of this Act.

Sec. 19. That this act of Incorporation shall continue ninety-nine years, unless sooner forfeited, and that this Act take effect and be in force from and after its passage.

Approved January 21st, 1858.

BALTIMORE AND OHIO RAILROAD.

The regular monthly meeting of the Board of Directors of the Baltimore and Ohio Railroad Company was held yesterday morning. The revenue of the road for the month of February was reported as follows:

	Main Stem.	N. W. Virg'a.	Wash. Branch.	Total.
For Pas's.	\$38,357.53	\$2,207.07	\$24,093.79	\$64,658.39
For Freight.	192,235.15	14,100.49	9,380.03	215,715.57
	\$230,592.58	\$16,307.56	\$33,473.82	\$280,373.96

Compared with the same month in 1857 these returns show the following result:

	Main Stem.	N. W. Virg.	Wash. Br.	Total.
Feb. 1857	\$316,101.87		\$34,775.26	\$350,877.13
" 1858	\$230,592.58	\$16,307.56	\$33,473.82	\$280,373.96

Decrease for 1858.....\$70,503.17

The transportation eastwardly into the city of Baltimore on some of the principal staples during the month has been as follows:

Bark.....	55 tons.	Lumber.....	101 tons
Coal.....	8,811 "	Lime.....	13 "
Fire-Brick....	35 "	Live Stock, v.z:	
Fire-Wood.....	"	8,828 Hogs..	
Flour.....	47,154 1/2 bbls.	1,854 Sheep..	
Grain.....	1,368 tons.	268 Horses and	
Granite.....	"	Mules.....	
Iron.....	316 "	934 horned cat-	
Iron ore and		tle.....	
Manganese..	642 "	Meal and Shorts.	281 tons.
Lard and But-		Pork and Bacon	4,067 "
ter.....	867 "	Tobacco.....	1,602 bbls
Leather.....	109 "	Whiskey.....	7,093 bbls
Cotton.....	137 bales	Miscellaneous..	454 tons
Wool.....	17 "	Hay.....	17 "
Flaxseed.....	—casks	Hemp.....	26 "
Soap Stone....	—tons	Flour from	
Lard Oil.....	98 "	Washington	
		Branch.....	—bbls.

At a meeting of the Board yesterday the following Committees were announced by the President:

Finance.—Johns Hopkins, chairman; Benjamin Deford, Wm. E. Bartlett, Jr., Columbus O'Donnell, Wm. Chesnut, John W. Garrett, James H. Carter, J. J. Smith, Wm. W. Johnston.

Transportation and Machinery.—Wm. E. Bartlett, Jr., chairman; John W. Garrett, J. B. Brinkley, Samuel W. Smith, Benjamin Deford, Francis Buras, Wm. Robinson, John Coates, James H. Carter.

Construction.—Wm. J. Bryson, chairman; Columbus O'Donnell, Wm. H. Stewart, John M. Smith, Wm. A.

Hack, H. C. Smith, John W. Garrett, Dr. C. H. Ohr, S. T. C. Brown.

Accidents.—J. Spear, Nichols, chairman; J. I. Smith, Dr. W. B. Tyler, Wm. W. Taylor, Wm. Chesnut, Wm. Robinson, Nathan Tyson, Dr. C. H. Ohr, S. T. C. Brown.

Accounts.—Wm. Chesnut, chairman; John Gregg, J. H. Carter, J. S. Nichols, J. M. Smith, Allen A. Chapman, H. C. Smith, Benjamin G. Fitzhugh, H. S. Lanseford.

Purchase.—Wm. H. Stewart, chairman; J. B. Brinkley, Wm. A. Hack, Wesley Starr, John Coates, Wm. J. Bryson, J. I. Smith, Nathan Tyson, H. S. Lanseford.

Mails.—Benjamin Deford, Chairman; Johns Hopkins, John Gregg, Benjamin G. Fitzhugh, Allen A. Chapman, Wm. W. Johnston, Dr. C. H. Ohr, J. I. Smith, J. M. Smith.

INTEREST ON DEPOSITS.

Many of the Banking Institutions of our country, and among them the Banks of New York City, have been accustomed to allow interest on deposits. The system is an extremely mischievous one, and one which we have shown was attended with very pernicious results in the panic of 1854, in this city. The experience of 1857 has taught the New York Banks the same lesson. The Clearing House Association has taken up the subject, and a committee has reported adversely to the practice. The Report of the Committee embodies a strong argument against the practice. We deem the whole subject one of sufficient importance to give our readers the Report.

The Committee says:

They believe that the custom of allowing interest on current deposits is unsound in principle, unsafe in practice, and that it operates injuriously, both upon the banks themselves and upon the commercial community.

Because:

1. Such deposits represent that portion of the floating capital of the country which is held temporarily in reserve from productive investment, waiting to be employed by its owners, as prudence and opportunity shall dictate.

They indicate to some extent the measure of discretion in the financial operations of the country, and serve to mark the bounds within which it has been deemed wise to limit commercial transactions. Such deposits bear the same relation to the business of country banks that specie does to our city banks, and are not legitimately the subject of profit or interest to their owners in the one case more than in the other. They both constitute, from the nature of the case, the amount of capital on hand necessarily idle for the moment, and therefore not legitimately the subject of direct profits. All effort, therefore, to derive interest from such deposits, may be considered as an overworking of capital to its peril; and implies a permission on the part of its owners that the very reserve which constitutes their credit and safety, and which they themselves have deemed it prudent to withhold from use, may be placed in jeopardy by others. It is clear, also, that if the principle be correct, of deriving direct profits from reserve floating capital, and if it were carried to its logical result, there would be no reserve power whatever. The whole financial system of the country would be expanded to its utmost limit, and be subjected momentarily to destruction.

As such deposits constitute the credit and stability of the country at large, its conservative power for sudden contingencies, they should be considered an inviolable trust, free from all risk, and consequently from direct profits. Those, therefore, who insist upon receiving interest on such reserve capital, so far relinquish the idea of holding it in reserve; but it becomes at once a special risk, and they, therefore, so far depart from the line of safety.

2. Were there no extraneous influences brought to bear upon them, it is certain that this reserve fund, at command of country banks, would naturally be divided, mainly, into two kinds, viz: Specie in their vaults, and deposits in New York for the purposes of exchange; and that there would consequently be scattered throughout the interior, a multiplicity of substantial resources for supplying the drain from our commercial centers, and affording a more secure basis for the financial operations of the country.

Now, no one can deny that the payment of interest on deposits in New York necessarily tends to increase the one portion of the reserve referred to at the expense of the other; and from the fact that deposits in New York are equally available to those who command them in any portion of the land, they have come to be regarded as equivalent to, and have nearly superseded, the use of specie, as a conservative resource. So that the prac-

tice of paying interests on deposits in New York, is operating continually as a process of exhaustion of the specie strength of the country.

Nor can it be said that the pernicious influence which thus operates to impoverish the interior, ceases its work here. The same cause which unnaturally draws the specie to the city, continues of necessity to effect its expulsion hence, and compels its exportation.

3. No Bank, in the opinion of your Committee, can allow interest on deposits payable on demand, without danger alike to itself and to the public.

The profit is more nominal than actual—apparent than real. Take, for example, the case of a bank paying four per cent. interest (the rate which custom has established) on bank and bankers' balances, to the amount of one million of dollars, and allow of this, say 20 per cent., to strengthen the specie reserve, and the following result would be shown:

Interest paid on amount of deposit, \$1,000,000 is \$40,000
Deduct 20 per cent. for reserved
specie..... 200,000

Leaves..... \$800,000
Interest on the above \$800,000, at 7 per cent..... 56,000

Leaves..... \$16,000

On the other hand, suppose a bank has deposits without interest to the amount of \$300,000
Deduct reserve for specie..... 60,000

Leaves..... \$240,000
On which interest at 7 per cent. is..... \$16,800

This result is attained without allowing for increased loss on the larger amount discounted, or for additional clerk hire, and other expenses, which more than double the amount of business necessarily involves. Were these considerations and the losses incident to the larger volume of business and risks allowed for, a sum even less than \$250,000, without interest, would be shown to be equal to a deposit of \$1,000,000 drawing 4 per cent. interest.

It is clear, therefore, that whatever profit is derived from business of this character, must of necessity be made by placing the largest possible proportion of such deposits on the interest, or, in other words, by encroaching, in disregard of the highest prudential considerations, upon the amount which it is every where acknowledged should be retained for specie reserve. A bank having committed this first error of paying interest on its deposits, is therefore compelled, by the necessities of its position, to take the second false step, and expand its operations beyond all prudent bounds.

And it may be truly stated that, were the banks in this city arranged in the order of their actual profits and prosperity for the last four years, the majority of those above the average would largely consist of those who have not, as a custom, allowed interest on deposits.

4. Your committee also insist that banks are, properly, lenders of capital, and not borrowers, and that it is not one of their legitimate functions to disturb the natural current of trade by borrowing at one price, to lend at a higher. Such transactions constitute speculation in money, and stimulate a tendency in the community, which is dangerous to all, and which ultimately reacts on the banks themselves with destructive power. From the nature of their organization, they should be conservative. They are intentionally restricted in their operations within prescribed limits, which mark the bounds that long experience has fixed as commercially safe to themselves and to the community; and they can not afford, for an apparent profit, to foster a principle which in its final issue, will return injury for injury with accumulated force.

Banks are designed to become permanent institutions, and, therefore, have the highest motives to regard every influence which they exert upon the financial operations of the community, whose commercial character alone gives such institutions all their stability and life.

Banks in this city have also a common interest and can not be isolated. The discredit or weakness of one operates to the prejudice and injury of all, and therefore it can not be safely conceded that any member has perfect freedom to carry into practice those principles of business which are generally acknowledged as inherently pernicious, or injurious to the whole. The experience of the last year has strikingly demonstrated the fact of mutual dependence, and we may remind some, that the practice of paying interest on deposits, was confessedly a prime cause, in more than one case, of recent embarrassment. Besides—a certain amount of specie in this city is indispensable to the safety of the commercial community, and to the existence of the Banks. Now having established an equitable principle upon which that amount should be based, it is neither safe to itself, nor even honorable towards the others, that any Banks should embody in its practice, a principle of business which prevents it from carrying its relative proportion of this specie reserve. The practical assumption, that because others are more constitutionally conservative, or possess a higher sense of their obligations to society, and that, therefore, their fears will compel them to provide the amount required for the common safety, can not be too strongly condemned. The known fact, that such a position may be effectually assumed, ought, in the opinion of your Committee, to induce every member of this Association cheerfully to acquiesce in an agreement, which at once removes the temptation and necessity, to depart from sound principles. No considerations of profit, in special cases, can for a moment compare with the benefits which every member would derive from the comfort and pleasure,

and the profit also, of doing business free from the existence of this radical evil.

5. In reply to the objection that a discontinuance of interest would divert capital to other cities, your Committee would remark:

That if the banks in other cities do not, as we believe they would, accept the testimony of our experience, we can well afford to give them opportunity to learn from their own; confident that they will, sooner or later, reach the same result.

If the payment of interest on deposits serve to attract capital unnaturally to this city, it is plain that it must produce unsteadiness in business, and thus operate unfavorably both upon the banks and the community, inasmuch as that capital which flows out of its natural channel, must, in the nature of things, suddenly return again, and can only be held with great uncertainty as to its repayment. It is in fact sure to be withdrawn at the very moment least convenient for the banks to pay. All such forced deposits operate as a source of annoyance to the public, by promoting a feverish money market and fluctuating value. The necessity for holding them at instant command, and at the same time of keeping it employed at remunerating prices, has given rise to the system of "loans on call," which constitutes another evil, the legitimate outgrowth of the payment of interest on deposits, and which, it is believed, is universally regarded as obnoxious. In fact, the banks, having borrowed money "on call, with interest," are compelled to loan in the same manner; and thus the system is diffused throughout the entire community, causing the unnecessary rise and fall of stocks, the inflation or contraction of our money market, and aggravates the multiplied evils, both financial and moral, of the Stock Exchange. The banks thus become instruments of evil, to direct capital into the destructive channels of speculation to which it would not naturally flow because they have borrowed money which can not profitably be used to sustain the legitimate commerce of the country.

But your committee believe that the danger of diverting any considerable amount of substantial deposits from our banks is greatly over-estimated, because this city has become the financial center of the country at large, and must continue to be the main depository of its surplus funds, without such fictitious inducements. The well known fact that a deposit in New York is as valuable as specie, in any portion of the United States, has secured the legitimate surplus deposits to this city, as the result of an inevitable law of trade. Nothing, therefore, but unhealthy competition among our banks has led to the payment of interest, and such competition is a gratuitous and self-inflicted injury, imposed on the banking system by its own members. The proposed agreement to abolish the practice amounts, then, to nothing more nor less than a unanimous resolve to cease from destructive warfare on each other.

6. It is worthy of considerate attention, as directly bearing upon our subject, that by the rapid improvements made in travel and intercourse, this country and the commercial world are daily becoming more and more a unit in their operations and influences, and that financial changes are every where becoming more sudden and simultaneous. The experience of the last year has strikingly proved this, and it must daily become still more apparent as these improvements advance.

For the same reason, the transition of floating capital from point to point are daily becoming more rapid and certain. The whole tendency of these improvements is also toward the centralization of commerce and capital at such leading points as London and New York.

Formerly, it was safe to assume that stagnation of business and release of capital would occur in one locality, while there was activity in another, so that an average amount of deposits could be relied upon as permanent in New York. But as this world's intelligence and consequent activity in commercial operations are every where simultaneous, and the financial current is more rapid and extensive, the focal points require a larger comparative reserve to meet contingencies of business as they increase in power and magnitude.

As an illustration of this truth, and of the transient character of these deposits, it may not be amiss to remind the officers of our city banks that during the week of financial excitement in October last, the exaggerated reports of which were carried with the speed of lightning to every part of the land, this new medium of communication with equal rapidity filled our banks with imperative orders for the immediate return of their deposits in specie.

The necessity for holding a larger proportionate amount of specie, therefore, precludes the possibility of paying interest on deposits, without a continually increasing hazard. For the same reason any unsound principles or pernicious practices in the monetary institutions of New York are not confined in their influences within their own walls, nor even in the city or elements which permit them, but they enter at once, as elements, into the subtle atmosphere of trade, and tend, sooner or later, to produce those violent commercial revolutions which for the last year have so universally prevailed. The responsibility of greatly retarding, if not of preventing the recurrence of such calamities, is thus continually bearing more directly upon our city banks. They are, therefore, bound by every consideration of self-interest and humanity to ponder every measure proposed for the common good, with views and aims reaching beyond the merely temporary advantages supposed to be derived by any particular institution.

7. The example of Banks in Great Britain has been cited to shew the correctness of the principle of paying

interest. But so far as your Committee are aware, the practice of allowing interest by joint stock banks (only instituted in 1834), differs widely from the system which prevails with us. They discriminate between a current and an interest account, not allowing interest on the former. Since the developments in Liverpool and Glasgow, during the recent crisis, of the tendency to wild and unvarranted banking in their institutions, it would hardly be safe to take Great Britain as a perfect model for our future financial operations, although we are glad to be instructed by the true exponents of sound principles in any country. Beside, the banks there, other than the Bank of England, are not the point of last resort, whence the whole nation is to be supplied with coin. Their banks bear about the same relation to the Bank of England as our country banks do to those of this city. It may well be doubted whether a better system than that created in this State, under the Free Banking law of 1838, and the several acts amendatory thereof, exists either in this country or in England. But the Bank of England, in which the specie strength of the country is mainly concentrated, has never allowed interest on deposits.

It is also instructive to remark, that in a recent discussion in Parliament, on the bill to legalize the suspension of the Bank Charter Act, the very practice of paying interest on deposits, even in the modified form there allowed by joint stock banks, was severely censured by the Chancellor of the Exchequer, as a principal cause of the financial embarrassments in Great Britain.

The very fact also, that the banks in New York contain, to a greater degree than any other, the concentrated deposits of the nation, and in that respect, as the ultimate resort for specie reserve, bear the same relation to this country as the Bank of England does to the United Kingdom, and that in its long career that bank has never adopted the practice, might well be adduced to confirm the opinion which our own experience has taught us. The fact, also, that in our united body we occupy that important relative position in this nation, renders it the more necessary that now, in a time of tranquility, with the memory of the evils of divided views, which prevailed during the recent crisis, clearly before us, we should unite in establishing such principles of action as shall protect ourselves and the public, as far as may be, against the recurrence of similar misfortunes.

The moral as well as financial responsibility of the managers of our banks is thus daily enlarging, and both duty and interest require us to yield something of what may seem temporarily advantageous to any specific interest, if we can thereby unite in establishing such simple and fundamental principles as will make us a conservative rather than a destructive power in the nation, and prevent the degrading competition which has hitherto tended to distract our councils.

It is also evident that no just parallel can be drawn between a new country like our own, where capital is greatly disproportioned to the material necessities and commercial activity of the nation, and those of older European countries where it comparatively abounds. Here (and the disparity becomes still more evident as we recede from the Atlantic coast to the far interior, from whence much of our bank deposit is derived) there can hardly be said to exist a reserve of capital in any just sense as it is understood in Europe—certainly, none which can be retained in any reliable average amount by any rate of interest which even the most adventurous of our city banks has ever allowed. Beside this, the well known characteristics of our nation for enterprise and adventure, and the value of money, and the multiplied and multiplying demands for its investment, ever prevent a reserve of capital on deposit in New York, excepting such as the necessities of trade imperatively demand, and such, therefore, as must of necessity pass through our banks, whether interest on them be allowed or not.

8. Interest has been hitherto allowed mainly on accounts from abroad, which are the least valuable portion of a bank's deposits, because

They fluctuate most and are least reliable at the active period of the year.

They come when we want them least and go when needed most.

They are attended with more labor in correspondence and more risks from the incidents of business, such as endorsing and guaranteeing endorsements, and from forgeries and accidents of every kind.

If, therefore, the principle be correct of allowing such interest, it has always been unequally applied, and other depositors are entitled to rights which they have not received.

Banks should occupy high moral ground, and can not discriminate with their dealers when the conditions are equal, without degrading their institutions and their profession. For the same reason, your Committee must insist, that the objection which is made to uniting with us, on the part of any bank, "that it has but few accounts to which interest is allowed," is not sufficient to justify its position; for if they are right with the few, it has less sacrifice to make, and is wrong with the many from whom interest is withheld.

Those banks only are really consistent who have either paid no interest at all, or have made it a rule of general application, under equal conditions of value.

The Committee desire but to refer to the further objection that the agreement, if made, will not be faithfully kept, and to say in reply, that they are unwilling to believe that any bank officer who has deliberately signed this agreement, especially with concurrence of his Board, has done so with any other than an honorable intent, or entertains a serious doubt of the good faith of others. But if it were so, the Clearing House Association has created a community of interest among our

banks, limited in numbers and possessing means of general and special information with regard to the transactions of its respective institutions, which gives it an influence in this regard, and constitutes it a moral tribunal for offenses against the common good which no member of the Association would more than once venture to defy. Surely no advantage which could accrue to a gentleman in official relations, however weak his moral sense, could be sufficient to tempt him to incur the odium of public exposure before his professional friends. And if it were possible to believe that such a character existed in a place of honorable trust, the public and private benefits derived from his exposure and expulsion may well repay the effort which we make for higher objects.

Having thus endeavored to show that the practice of the payment of interest on deposits by our city banks is—

1. Inherently unsound;
2. That it tends to weaken the legitimate commerce of the country, and to disturb the regularity of the business of the city;
3. That no bank can safely and profitably practice it;
4. That it tends to interfere with the efficiency and stability of our banks, and with the harmony of their intercourse with each other;
5. That its discontinuance will not divert any substantial deposit from this city;
6. That the reasons for its discontinuance are daily increasing;
7. That it has, under like conditions, no fair precedent in older countries;
8. That, as it exists here, it has been unjustly applied;

Your Committee, in conclusion, have only to repeat their firm convictions that this agreement, if consummated, will promote the highest public benefit, and insure the greater prosperity and stability of the banks in this city; and that no simple measure can be adopted of a public or legislative character that will so effectually secure the good of the country at large, without the least admixture of evil. They, therefore, on behalf of the very large majority of their associates, who agree with them in these views, confidently appeal to the good sense of the minority, with this weight of opinion against their position, and leave with them the serious responsibility of defeating a measure which is deemed so important and vital to the interest of the commercial and financial community.

WILLIAM A. BOOTH,
JOHN E. WILLIAMS,
E. W. DUNHAM,
PARKER HANDY,

} Committee.

New York, March 4, 1858.

GENERAL BANKRUPT LAW.

We promised in our last to give our readers a fuller notice of a movement towards obtaining the passage of a general Bankrupt Law. That there should be some general law governing the relations of debtor and creditor is very evident from a consideration of the various laws in the different States. Whether the present movement is designed to secure the desired uniformity in the laws for collection of debts or not we are not prepared to say. The following however is the circular of the committee having this matter in charge.

NEW YORK, 1858.

"SIR: A general movement is being made by the business men of this city to bring before Congress, at an early day, the great importance to our country of securing the passage of a general Bankrupt law, at this present session.

"As the measure is of a national character, and demand alike by every business community, it is confidently hoped that those friendly to the passage of such a law will not only use their influence in its favor, with their friends in Congress, but will also get up petitions upon the subject, securing signatures thereto, and when signed forward the same to Congress with as little delay as possible, in order that the voice of the people may be heard by our representatives, upon this great and vitally important measure.

"The friends of the proposed law offer the following, as among the many arguments in favor of its adoption:

"FIRST: That all credits should be based upon property and character; and that creditors should have the right secured for them, by laws equally operative

throughout the land, by which they can share *pro rata* in the distribution of all insolvent debtor's estates.

"SECOND: That a general law, liberal in its provisions, and which shall discharge the debtor from his liabilities, upon the surrender of his property, will not only be humane, and a great public gain, but will leave that great moral link connecting debtor and creditor unsevered, impelling the former to use the energies thus generously released in repaying the losses of the latter.

"THIRD:—That the small dividends under the laws of 1841 should have no weight against the passage of the present proposed law, from the fact that the insolvents of 1841 were made so by the revulsions of 1837, or previously, and as a natural consequence, had used up their assets by family livings, speculations, law expenses, &c., previous to its passage.

"FOURTH: The immediate passage of a liberal bankrupt law would not only secure millions of dollars to present creditors that otherwise must be wholly lost, but would immediately restore to the active business community thousands of honest, industrious and enterprising men, free from debt, and without the loss of their business friends, or the entire destruction of their faculties by hopeless delay or idleness.

"FIFTH: The passage of the proposed law would operate to entirely supersede the system of preferred creditors by which the money-lenders takes not only precedence over all others, but absorbs the very property sold and delivered in good faith by merchants, jobbers, manufacturers, &c. &c., instead of securing them full and equitable justice, an equal division of the entire assets of bankrupts, among all and every description of creditors.

"SIXTH: The immediate adoption by Congress of this measure will restore general confidence, and revive business at once, and merely by securing the assets of the debtor for the creditor, or the discharge of the former that he may again be of use to himself, family and society; but as a basis upon which thousands yet doing business can meet their creditors, explaining their position without fear, and thus possibly be saved from ultimate bankruptcy.

"SEVENTH: That from general observations made within the last six months, it is asserted that a great majority of the business community, at the present time, are fully of the opinion that the Bankrupt Law of 1841 should not have been repealed, but simply amended in some of its provisions; had that been done, and the law remained upon the statute-book to this day, it would be looked upon as not only the great sheet-anchor for the protection of creditors, but as the most conservative law of the land.

"In forwarding this circular to your address, the Committee having the matter in charge have to request that you and others friendly to the proposed law will take measures at once, such as you in your wisdom may deem most effectual, in making your wishes known in Congress on this great subject. That all its friends may act as much in harmony as possible, it is desirable that each should know as frequently as possible the general plan adopted by others, and as New York is the great center of commerce, it has been deemed advisable to have the Central Committee here, and have the doings of other places made known here for the purpose of radiation to all other points.

"On receipt of this, please reply without delay, stating whether you are friendly to the measure, and if so, whether you and your friends will move in the matter as above suggested. Please address, CENTRAL COMMITTEE. "Box No. 451 New York Post Office."

THE GEORGIAN BAY AND ONTARIO SHIP CANAL.

At length we have something definite and reliable upon this subject. The report of the Engineer, Kivas Tully, Esq., with an excellent map of the route, is before us. It is especially gratifying to us that the particular route so often noticed in these columns, and found from actual survey to be the best, and it is a source of still greater satisfaction to ourselves, and we have no doubt to the business public, that the work, though expensive, is proved to be entirely feasible.

The report commences at the Lake Ontario terminus; but in our synopsis of it we shall begin at the Georgian Bay, as being the most natural in contemplating the work from our stand point. And here let us request our readers to place a map before them, for even though it be a small one, a much clearer and more definite idea can by this means be formed of the location and the importance of this great enterprise. Let us further premise that on the subject of terminal harbors at the mouth of the Nottawasaga River on the Georgian Bay and at the mouth of the Humber on Lake Ontario, the report shows that ample accommodations can be secured at a reasonable expense. The report also shows that Lake Simcoe, which is the summit, affords an

abundance of water to feed the canal; in fact a very large surplus beyond what can be used for canal purposes. The estimates are made for a canal of sufficient size to pass vessels of a thousand tons burthen.

From the mouth of the Nottawasaga on Georgian Bay the route lies for twenty miles up the valley of that river, and presents no engineering difficulties whatever. From this point where it leaves the river to Kempenfeldt Bay on Lake Simcoe, is only nine miles. The greatest depth to be excavated in this nine miles is 78 feet and the total amount of excavation is 6,000,000 yards, and the estimated cost of these nine miles is put down at \$1,500,000. The total distance from the Georgian Bay to Lake Simcoe is twenty-nine miles, and the lockage to be overcome 130 feet requiring 11 locks of about 12 feet lift.

Lake Simcoe is navigable for vessels of the largest class, and furnishes twenty-four miles of the distance without expense. The total length of the summit level, including the nine miles last referred to, Lake Simcoe, the portion of the canal through the marshes of the Holland River and the ridge south of Lake Simcoe where the canal would begin to descend to Lake Ontario, is fifty-six miles. The entire length of the route surveyed is one hundred miles, so that the summit will embrace more than half the entire distance.

Between the Holland and the Humber rivers is where the real serious difficulty in the way of the construction of the canal is to be found. Supposing ourselves standing on the south side of the ridges, we quote the language of the report:

Along the valley of the Humber there are no engineering difficulties of any extraordinary character as far as the 23d section (north of Lake Ontario) at the town line of Vaughan and King, where the deep excavation through the ridges commences. This excavation extends ten miles. [Here it reaches the marshes of the Holland River, which empties into Lake Simcoe.—Eds.] The greatest depth to be excavated will be 197.76 feet or 2.24 under 200 feet. This will be the greatest depth from the summit. The ridges present a gradual inclination north and south; the slope to the north being five and a half miles in length, and the southern slope four and a half miles; total ten miles. The depth of this excavation will average 90 feet, and will contain nearly 48,000,000 cubic yards, and being composed, as far as can be conjectured, of light clay and gravel, will not cost more than 25 cents per yard, making a total of \$12,000,000. From the 33d section, (commencing on Lake Ontario) to the 48th to Cook's Bay at Lake Simcoe, the canal would pass through the Holland river marsh, following its course except at the bends of the river, which are cut off. A considerable portion of this river is of an available capacity, and would require slight alterations averaging 150 feet in width, with a depth of water from 9 to 12 feet.

We present the following table in full showing the estimated cost of the work.

ESTIMATE.			
Quantity	Des. of work	Rate.	
63,300,000 c. y.	Earth excavation	25c.	\$15,825,000
30	Locks complete..	\$80,000	4,000,000
40	Dams.....	5,000	200,000
25	Waste weirs.....	4,000	100,000
2	Harbor accom's	200,000	400,000
2	" Lake Simcoe	100,000	200,000
50	Accomda bridges	5,000	250,000
15	Culverts.....	8,000	120,000
	Land damages...		200,000
			\$21,115,000
	Engineering and contingencies...		1,655,750
			\$22,770,750

The lockage from Lake Simcoe down to Lake Ontario is 470 feet, making the entire lockage of the canal 600 feet, requiring 50 locks of 12 feet each.

We omit any reference to the other three routes surveyed, as a synopsis of the facts in reference to the one which proved to be the best is sufficient for our purposes. It shows conclusively that the work is entirely practicable, and at a cost which will insure its construction at no distant day.

Other important questions still remain to be discussed. Does the commerce of the West require the construction of the Georgian Bay Canal? Will it pay the interest on the cost of its construction? If it would not pay now, will it be likely to do so by the time it can be completed? To these questions our fellow citizen, Col. R. B. Mason, will at once address himself, and whatever conclusion he shall arrive at we doubt not will command the respect and the entire confidence of the scientific and the commercial world. The results as soon as they are reached, will be presented to our readers.

So important, however, do we deem this work, and so deep is our interest in it, that we present a few considerations from facts already known, which may tend to throw some light upon the question as to whether the Canal would pay an interest on its cost. In the first place we have been assured that the average delay and expense of lightering vessels over the St. Clair Flats would be at least fully equal to the delay by lockage and the cost of tolls upon the Georgian Bay Canal. Many believe that in these two regards the route by the St. Clair River would be found in practice to be the most expensive; but suppose them to be only equal; the amount of saving on the transport of the commerce of the lakes which shippers could afford to pay as an additional tax to the Georgian Bay Canal would be limited by the amount saved for transit on the shorter distance by this route. The amount saved on the distance to New York by Oswego, Mr. Tully puts down at 405 miles, and the time four days. The amount saved on the distance to Quebec and Liverpool is 537 miles. Making no account of the time, which, by the way, is a very important element, and taking the average distance 459 miles, we present the following table:

The present value of Lake Commerce as shown by official documents of previous years, must now be about.....	\$700,000,000
Half east and half west.....	350,000,000
Transport on the Lakes is equal at a low figure to about say five per cent.....	\$35,000,000
Suppose we assign to Lake Michigan, the upper portion of Huron and Superior, say one third.....	12,000,000
The average distance of Lake transport is, say 1,200 miles. It would be shortened one-third by this route, and the cost therefore is reduced one-third. This saving would be twelve millions of dollars one-third of.....	4,000,000
This would be equal to an annual interest of five per cent on.....	\$80,000,000

This, it will be seen, is nearly four times the estimated cost of the work. Either the amount of commerce or the tolls, on this hypothesis might be reduced two-thirds, and yet the Canal would yield a revenue sufficient even now to warrant its construction.

But he must be utterly ignorant of the extent and resources of the vast and magnificent country west and northwest of Lakes Michigan and Superior, who does not know that their commerce, immense as it now confessedly is, is but just beginning to be developed. Let any man examine the map, with a knowledge of the rapidity with which this country is filling up with a population of

great intelligence and unswerving energy, and he can not doubt that the child is born who will see our lake commerce increased a dozen fold. Begin the Canal on the first of May next, and before it can possibly be completed our lake commerce will have doubled, and the necessity of the Georgian Bay Canal will be increased in a corresponding ratio. If Canada will take hold of the work in earnest and build it, we will guarantee that the West will furnish it with a satisfactory amount of business.

Whatever be the immediate result of the present movement, now that it has been proved to be entirely practicable, we have an abiding faith that we shall live, if spared to the age of our fathers, to see this great work completed. It would add very materially to the value of every acre of land west of the lakes, and its effect upon the growth and prosperity of our own city can not be estimated. The agitation which has resulted in this survey, originated in these columns sometime in 1853, and for several months the PRESS was the only journal here to advocate it. By some of our cotemporaries our opinions have been treated with a sneer and our efforts with contempt. If, however, we have in any way contributed to open another magnificent water-line of transport to the ocean, if by any means we can influence its early completion and thereby benefit the millions who are hereafter to find homes in the Miss. Valley, we shall have secured an abundant reward for all the labor and the expense we have incurred in calling the attention of the world to its manifest advantages.—*Chi. Press.*

ON THE AMALGAMATION OF SILVER.

We make the following abstract of a recent lecture before the British Government School of Mines on this subject:

The lecturer alluded to the reactions which occurred with chloride of copper and metallic silver, chloride of copper, and sulphide of silver, and di-chloride of copper and sulphide of silver. Although much had been written on this subject, it was very far from being satisfactorily investigated at present: and there was a great field open for further researches in this important matter. When chloride of silver is obtained, it is easily reduced to mercury. A good account of the Mexican method would be found in the "Annales des Mines." The method he had spoken of was that practiced at Zacatecas. Although there was several different modes of practicing the system of amalgamation in Mexico, yet there was not much variation; the loss sometimes was as much as from 10 to 24 ozs. of mercury to the mark of silver. When gold occurs in the ores, a little mercury is put in the arastre, and this is not removed for some time; the loss in some places is calculated to be only from 5 to 7 per cent., while at Fresnillo, where the ore is galena, pyrites, and blende, it is stated to amount to 28 per cent. At Zacatecas, where the ore is in a quartzose vein, the difference between the assay and the product is from 35 to 40 per cent. It has been proposed to substitute an amalgam of copper and mercury, but he had not heard that this had been successfully carried out. The consumption of Mercury in Mexico was stated to be 2,000,000 lbs. troy annually; in Chili, Peru, and Buenos Ayres, it was estimated to amount to 1250, tons.

He would now refer to an amalgamation process as practiced at Frieberg, in Saxony. A diagram of the furnaces and apparatus they

had before them. In the year 1738, amalgamation works were erected at Koingsberg, in Norway, and in 1680 they were introduced at Schemnitz in Hungary. At Frieberg, works of this description were built in 1790; afterwards burnt down, and subsequently re-erected in 1794. The silver in the ores is sulphide, which is converted into a chloride by roasting in contact with common salt, in presence of a sufficient quantity of iron pyrites, chloride being generated. This is brought into contact with iron and water. The amalgam is then submitted to pressure in the ordinary way, and afterwards reduced by heat. The mercury is evolved, and contains a portion of silver; but, as it has to be reduced again, the precious metal is recovered. A good description of this process, by Mr. Vivian, will be found in Taylor's "Record of Mining." On looking at the diagram, they would perceive that the works were divided into four compartments, each being separated from the other by a wall. The first process is the roasting; the ore ought to be reduced to a fine state of division, and then mixed carefully with common salt. The average produce ought to be from 70 to 80 oz. of silver to the ton of ore. The best ores are dry—that is, free from lead. A layer of ore is first placed, and over this the salt is uniformly levelled. The charge which is let down is about 4 cwt. The furnace is a reverberatory one, with several modifications; and in these it differs from those commonly employed. The bed is in two parts, the one farthest from the fire place being slightly raised. On this at first the ores are placed, and subsequently they are pushed on to the lower. The rabbling must be effected with great care, and every precaution in these works is taken to prevent loss on the one hand, and pilfering on the other. The flame, they would perceive from the plan, went circuitously, in order to prevent any of the silver from being carried away by mechanical means. Great care is always required at the first part of the operation, or else clotting ensues. Towards the close of the process the temperature is gradually raised, and the sulphur then burns. The ore being roasted, is then lifted to the upper part of the works by simple machinery, and is afterwards sifted on a species of inclined sieve and that which passes through the sieve is fit for the subsequent processes. What remains is again broken up, and mixed with about two per cent. more of salt. After this it is again reduced, then sifted, and sorted into suitable sizes. It then goes through a hopper, and is passed to mills which have stones of granite, where it is ground to an impalpable powder. After this the ore is raised again, and put into barrels with mercury, iron and water. The machinery is put in motion by two over-shot water wheels. All the barrels, of which there are four rows, can be stopped simultaneously or alone. The boxes above contain the charge, and to these there is attached a sacking, with a mouth-piece of iron, that can be fitted to the bung of the barrel. A little cistern is under the box, which has the necessary quantity of water. Between each runs a pipe, which goes to a mercury reservoir in a separate compartment; and there is another pipe below which is a kind of filter. There is likewise a trough underneath, and this is used as a channel to the washing apparatus which is constructed on nearly the same plan as the Mexican lavadero. The liquid amalgam is passed through a strong linen filter. No great amount of silver can

be lost, as the mercury is used again. The subsequent amalgamation is effected by heat. The barrels are 2 ft. 8 in. long, by 2 ft. 6 in. diameter at the widest part; the bung hole is 5 in. At one end of the barrels there is an iron plate, with teeth, by which they are set in motion. The charge is always let down from the box; the iron is in small bars, which are removed from time to time; the water is first put in; then the ore; the barrels require occasionally to be examined, in order to ascertain if there be a deficiency or an excess of water. The rapidity of the motion must likewise be looked to, and great care must be taken in order that the mud may not be too thick or too thin—both extremes should be avoided. He had, in the vicinity of London, been present at some experiments in gold amalgamation; when the mud was examined, it was nearly of the consistence of stone, and he need not tell them how unfavorable this was for the mercury to touch every particle of the metal. When the barrel is about two thirds full, the mercury is added. In general it revolves about 16 or 18 times in a minute, and this process continues for 18 hours. After some time the temperature is increased; and if the process goes on favorably, more water is added. The time of filling is about five or six hours, and the whole process lasts about 24. From an assay of the amalgam, it appeared that there were—Mercury, 84.2; silver, 11.6; copper, 3.5; antimony, 0.7; zinc, 0.2; lead, 0.1. The loss of mercury is said to be 2 per cent. The weight of the amalgam on the tripod, below the bell, is about 3 cwt. The object of the washing is to collect any particles that may be remaining. The time allowed for the mercury to remain in the box is from three to four weeks. About 5 to 9 per cent. was the loss generally reckoned, and much of this might occur in the grinding and other mechanical operations.

The lecturer then alluded to the Agustine process, which was intended to obviate the use of mercury. The chemical changes which occur in the process he had been describing would form the subject of another lecture.

SILVER MINING IN CALIFORNIA—THE SANTA CLARA QUICK SILVER MINES.

We have heretofore made reference to this subject and briefly referred to the Santa Clara Quick Silver mines, located in California. As quite a number of persons in Baltimore and elsewhere throughout the United States are interested in the mining business, and especially in the mines above spoken of, it may be interesting to learn further concerning them. The latest advices inform us that accounts received by the Santa Clara Co., from their mines are highly encouraging.

The excavations made had revealed ores of great richness and in increased quantity. With two benches of three iron retorts each, 77 flasks quick silver, of 76 1-2 lbs. each, had been produced in two weeks, and two other benches of retorts were in course of construction, which would soon increase the production to about 160 flasks every two weeks, the value of which in the San Francisco market is about \$8,000. Other benches were in contemplation, which when erected it was expected would, in a few months, increase the monthly production to \$25,000 in value. We congratulate the fortunate owners of this mine upon their successful enterprise, which has not been achieved without great patience and considerable outlay of capital. Quick silver

is already one of the most important productions of California; the export alone for 1857, chiefly from the New Almaden Mines, (within about four miles of the Santa Clara), having amounted to 27,262 flasks, the value of which, at \$50 per flask is 1,363,250. Of this large export, 14,334 flasks went to Mexico, 8,374 to New York, 3,554 to China, and 1,000 to Chili. Add to this the immense consumption of California, and some idea may be formed of the great and increasing product of the country.

New silver mines are being opened in Mexico, and old ones are beginning to be reworked, which require large quantities of quick silver in reducing the ores, so that the consumption is likely to increase with the supply. The La Yguana silver mines about four days journey from Brownsville, Texas, are just going into operation having lain idle for many years, and have already produced under American management, very rich ores. Two other large mines in Mexico, in full operation, one under the auspices of a company composed of some of the most distinguished merchants and capitalists of New York, and the other by a company whose office is in Cincinnati, with a capital of two millions, whose principal owners and active managers are officers of the army, who are employed along the boundary of Sonora and Arizona, and some capitalists of Ohio—these, with other mines, chiefly worked by English capital, consume large quantities of quick silver, and promise enormous profits to those engaged in working them, having under the Spanish management yielded immensely. The Valenciana and the Veta Grande yielded an average of 21,380 tons of silver ore, equal to 153,800 lbs, troy of silver, valued at £425,450 per annum, or \$2,049,324, for 6 years previous to 1825. The mines of Valenciana yielded an annual average profit, for the same time, of \$823,778, being an interest of near 700 per cent. on the capital invested, after paying back the original capital.—Mining therefore, steadily pursued, is not always the uncertain business which many persons suppose, as these results conclusively show.—*Baltimore Patriot*

MONETARY AND COMMERCIAL.

The monetary market during the week has presented a more regular appearance than during the preceding one. The payments of the early part of the month are over and very little maturing, has rendered the past a week of considerable ease. The regular houses are supplying the wants of their customers and doing something toward relieving the necessities of those who have hitherto been forced into the street. We quote regular rates at 10 to 12 per cent. Outside rates range from 12 to 24 per cent., and names not scrutinized with such closeness as at previous dates.

Exchange on New York and the East is in good supply, with a languid demand. We quote rates at 5-8 to 7-8 and 1 premium. New Orleans par to 1/4 premium buying, to 1/2 to 1 premium selling. American gold 1/2 to 3/4 and 7-8 premium.

Stocks are more active and prices tend towards favoring the seller.

In New York we notice a less favorable state of affairs. Money is in better demand, and stock speculation has received a check. The sales at the Board are less in amount and at lower prices than have been realized for the previous ten weeks.

The offers for the \$5,000,000 U. S. Treasury Notes are at higher rates of interest than was anticipated, and it is questionable whether the Secretary will accept them.

The Legislature of Massachusetts has passed an important law relating to Banking in that State. It provides that every bank shall keep on hand, in specie, fifteen per cent. of its liability for circulation and de-

posits. And that its circulation shall not exceed its capital stock. The act is to take effect June 1st.

SALES AT THE NEW YORK STOCK BOARD—March 15.

\$5,000 North Carolina State G's.....	94
2,000 Mich. State G's.....	100
1,000 Virginia G's.....	92 3/4
3,000 do.....	93
3,000 Tenn. State G's, '90.....	89
2,000 Miss. G's.....	84
1,000 N. Y. C. 6's.....	90 3/4
11,000 N. Y. C. 7's.....	102 1/2
1,000 Erie 3d M. '83.....	81
5,000 Erie R. R. Com. 5 1/2 '62.....	53
3,000 Hud. River R. R. 3d Mt.....	69
3,000 Illinois Central R. R. Bonds.....	94
1,000 Harlem 1st Mt. Bonds.....	84
500 Shares Erie R. R.....	20 3/4
100 " Harlem R. R.....	13 3/4
600 " Reading.....	52 3/4
50 " Illinois Central.....	96
100 " Mich. Cent.....	72
50 " Mich. S. & N. Ind.....	46
75 " " " " P. S.....	28 3/4
40 " Clev., Col. & Cin. R. R.....	58
50 " Galena & Chicago.....	92 3/4
150 " Cleveland & Toledo.....	45 3/4
15 " Chicago & Rock Island.....	62
50 " Milwaukee & Miss.....	73
215 " LaCrosse & Milwaukee.....	10 3/4
100 " Canton Company.....	23 3/4
100 " Clev. & Pitts.....	14
100 " Hud. River R. R.....	31 3/4

We subjoin our usual quotations from Hewson and Holmes' Stock Circular:

The buoyancy noticed at the date of our last circular, has resulted in a further advance in the leading railroad securities on our list. This is attributable more to the general revival of business and the consequent increased earnings of these roads, than to any decided increase in the supply of money available for this purpose.

Capital is only in moderate supply, barely sufficient for the growing wants of a more active business, there is consequently many good signatures forced off in the streets at pretty round rates of interest. In a general way it may be said that the money market is in as satisfactory condition as could be expected, and the tendency is evidently in the right direction.

Among the sales of the past week we notice, Covington & Lexington 2d mortgage at 55 and interest; those bonds have remained almost stationary in price for several weeks, and at our quotations 'hold out very decided inducements to capitalists. In the 3rd mortgages of this road, we have a decided advance to notice; a fortnight since large sales were made at 35; they are now held at 40, with sales at that figure. Little Miami 6's, always a favorable security in this market, have advanced 1 per cent, closing at 76 and interest. Hamilton & Dayton 7 per cent 2d mortgage have advanced 2 per cent since our last circular, closing at 72 and interest. We notice sales of Indianapolis & Cincinnati 10 per cent bonds at 80 and interest.

In shares there has also been a general moderate improvement. Little Miami has gone up to 76 1/2 to 77; and Columbus & Xenia to 74 1/2. Hamilton & Dayton shares are in request at 50. A month since it was difficult to find buyers for this stock at 40. Indianapolis & Cincinnati stock is quiet at 45. For further quotations and Sales, we refer to our list,

Eastern Exchange is dull and lower, with considerable sales at 1/2 to 3/4 premium on New York and Philadelphia, with 1/2 less on Baltimore. New Orleans funds are also dull, with only a moderate demand at 1/4 to 1/2 premium.

The spring trade opens languidly and the demand for all description of merchandise is largely disproportionate to last year. Mercantile collections are rather better, and our merchants are looking to the future with cheerfulness and hope.

CINCINNATI STOCK SALES.

March 18, 1858.

BONDS.

\$9,000 Cov. & Lex. R. R. Co. 2d Mort. 7 per cent. Bonds.....	55 and int.
\$4,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	76 and int.
\$6,100 Carter Co., Ky., 6 per cent. Bonds.....	45 "
\$3,000 Cov. & Lex. R. R. Co. 3d Mort. Bonds.....	40 "
\$5,000 Cin., Ham. & Day. R. R. 7 per cent. 2d Mort. Bonds.....	72 and int.
\$2,000 Indianapolis & Cin. R. R. Co. 10 per cent. R. E. Bonds.....	80 "
\$1,250 Indianapolis & Cincinnati 7 per cent. Dividend Bonds.....	62½ "
\$2,600 Col. & Xenia R. R. Co. 7 per cent. Div. Bonds. Due in '60 & '62.....	90 "
\$1,220 Little Miami R. R. Co. 6 per cent. Dividend Scrip.....	75 "
\$3,150 Certificates of Deposit in Ohio Life Ins. & Trust Co. Bank.....	35 to 38

STOCKS

700 Shares Little Miami R. R.....	76½ to 77
36 " Columbus & Xenia.....	74½
50 " Indianapolis & Cincinnati.....	45
48 " Cin'tl., Hamilton & Dayton.....	50
30 " Cov. & Lex. R. R.....	7½
100 " ".....	8
10 " Farmer's Bank, Ky.....	113

TO CIVIL ENGINEERS.

ENGINEERS about to commence field work in the Spring or to extend their office work, are respectfully informed that they can procure the services of one or more assistants, who are good draughtsmen, practiced in calculation of quantities, familiar with the determination of the proper dimensions of walls, arches, bridges, water channels, &c., and with considerable practice in the use of the Compass, Level, Transit, &c., in the field, having just finished a two years course of instruction in Civil Engineering, at Union College, New York. No one will be recommended, who does not fully satisfy the above requirements.

Address,

PROF. W. M. GILLESPIE,
Schenectady, N. Y.

March 11, 2t

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858.

For the Grubbing, Grading, Masonry, Bridging and Cross Ties, for the First Division of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids. Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK,

Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.
March 18—2t.

IRON BOILER FLUES
PASCAL IRON WORKS.

MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,
PHILADELPHIA. [20g

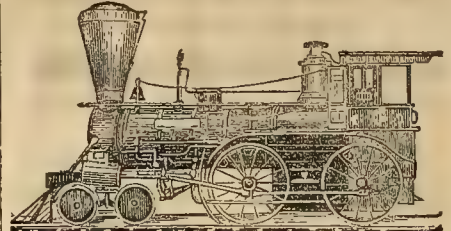
RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN & CO.,
no. 7 Wall st., N.

Feb. 7, '56-2m.]

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20 MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER,)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND.

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES.

Of the late firm of Bridges & Bro
JOEL C. LANE

feb4tr

MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.

These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floor, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 50 feet span, 8,000 lbs. weight, \$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2600 lbs. weight,\$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 52 squares, \$1200, or \$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES.

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc.; and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

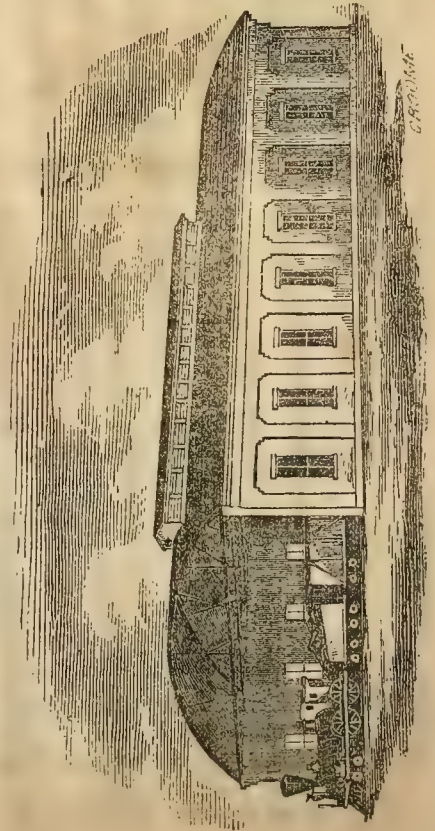
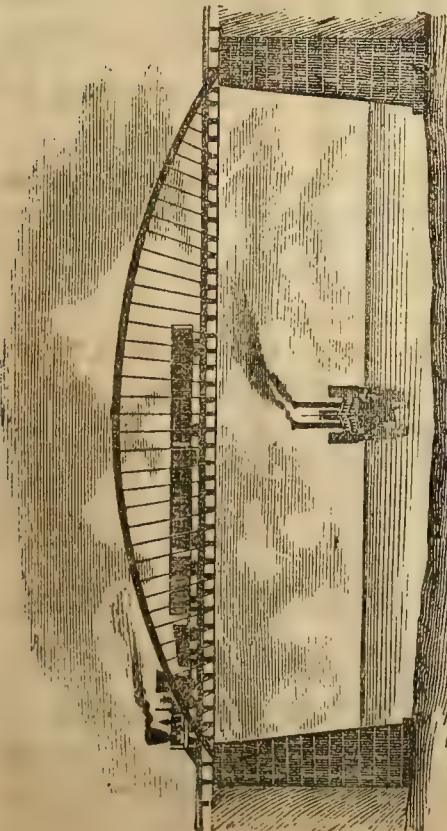
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 92 Broadway, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 18, 1858.—6m.



INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,
AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

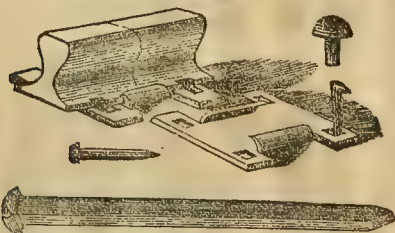
VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary Information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN**Railroad Chair and Spike Works**

WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of **Wrought Chairs, Hook and Flat Head Railroad Spikes, of all patterns, Boiler Rivets, Bolts** of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

feb 28

CORBY, GOSS, & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the **Ohio and Mississippi Railroad**, Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [jan1-ty] Agent.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,

43 Main St. Cincinnati, O.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,

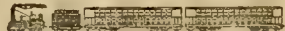
WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—1y

Norris' Locomotive Works.

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—
JAMES H. MORLEY, New York City.
Or **SUMNER SMALL, Boston, Mass.**

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 329 H Street, Washington, D. C. apr12

W. G. HYNDMAN'S**Patent Portable Forge and Bellows.**

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address **W. G. HYNDMAN,** ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,**Mechanical Engineer,**

AND

AMERICAN AND FOREIGN PATENT AGENT,

No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES'**METALLIC PACKING.****To Whom it May Concern.**

NOTICE is hereby given that Charles W. Grannies, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees. July 14, 1857. jy23-1m

D. M. CARHART,**TURN-TABLE BUILDER.**

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders'.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART,
oct29-6m Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO.**Mathematical Instrument Makers,**

Removed to No. 67 West 6th St.

CINCINNATI, O.

Most Direct Route to the East.

BALTIMORE AND OHIO
RAILROAD.From Wheeling to Baltimore and
Washington City, D. C.MAKING DIRECT AND CERTAIN CONNECTIONS WITH
PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting
lines) now offers the fullest advantages to travelers be-
tween all parts of the West and the larger Eastern
cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASH-
INGTON CITY, BALTIMORE, PHILADELPHIA and
NEW YORK, thus giving the Western merchant the
range of the Baltimore, Philadelphia and New York
markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars
of the Little Miami Railroad Express Train, at 6 A. M.,
10 A. M., or 6 P. M., for Columbus, connecting there
with the Central Ohio Railroad through Newark and
Zanesville, for Bel Air, on the Ohio, four miles from
Wheeling. From this place the connection with the
Baltimore and Ohio Railroad is made direct. By the
Express Train of this route, the time from Cincinnati
to Baltimore is but 26½ hours, and to Washington is but
27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2
Burnet House, second door west of Vine street; No. 177,
Gibson House Building, and old office, southeast corner
of Broadway and Front street, opposite the Spencer
House; or at the Eastern (Little Miami) Depot, East
Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and
Baltimore and Ohio Railroad.Baggage checked through from Cincinnati to Bal-
timore.FREIGHTS.—With the largest equipment of any rail-
road in the United States, the road is prepared to do an
immense business in the transportation of freights,
which are carried with care and dispatch, and at rates
as low as those of any other first class line. For particu-
lars see freight tariff, copies of which may be seen at
any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,
Jan 10 Office, Adams Express Co., Third street.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANS-
VILLE & CRAWFORDSVILLE, and the TERRE
HAUTE & ALTON RAILROADS.Trains leave Union Station, at Indianapolis, daily,
Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival
of the trains from Cincinnati.) Arrive at Terre Haute
at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the
Evansville & Crawfordville Railroad, for Vincennes,
Evansville, Cairo, and St. Louis. Or by the Terre
Haute & Alton Railroad, at 3:40 P. M., for St. Louis,
Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples,
La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre
Haute at 11:52 P. M.; making connections with the 12:30
A. M. trains of the Evansville & Crawfordville and the
Terre Haute & Alton Railroads, for the West and
South, as above.

E. J. PECK,

ap 10 Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the
above Mill, in connection with their improved
Hatchet Double Setting Head Blocks.They also keep on hand a full and complete assort-
ment of Cast Steel Saws of their own manufacture, Saw
Mandrels, Shingle Machines, &c.Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

1857.

November 30.

1857.

LITTLE MIAMI
AND COLUMBUS AND XENIA

RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE.
THROUGH TICKETS VIA.WHEELING,
STEUENVILLE,
PITTSBURGH,
CLEVELAND,
DUNKIRK,
BUFFALO,
NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus
and Cleveland, without change of cars. 9:40 A. M.
Express, through to Bellair without change of cars.

FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville,
and Wheeling Lightning Express, leaves Cincinnati at 6
A. M., for all the Eastern cities; also Springfield.
This train stops between Cincinnati and Columbus
at Loveland, Morrow, Xenia and London only.SECOND TRAIN.—Cleveland Express Mail, leaves
Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New
York, Boston, &c., Wheeling, Baltimore, Philadelphia,
Washington City.This train stops at all points between Cincinnati and
Columbus.THIRD TRAIN.—Columbus accommodation, leaves
Cincinnati at 4:30 P. M., arrives in Columbus at 9:55 P.
M., and connects with trains for Steubenville, Pitts-
burgh, Wheeling, Washington City, Baltimore, Philadel-
phia, New York, &c.; also, Springfield.This train stops at all points between Cincinnati and
Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than
Cincinnati time.

FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at
Union Office, No. 2 Burnet House, or at the Union Office
south-east corner Broadway and Front street, opposite
the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each
and every train. By leaving directions at either of the
above offices, they will call for passengers in all parts
of the city, without fail.

no 12

H. B. RUGGLES, Conductor.

TO LOUISVILLE
IN SIX HOURS.Change of time for Indianapolis, Chicago, and all
the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FU-
ther notice, the Trains will depart from Mill street
station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45
P. M.FREIGHT.—For Louisville, Indianapolis, Peru, Chicago,
Terre Haute, Vincennes, Evansville, and all interme-
diate stations, at 5:30 P. M.For further information in regard to Freight, apply
at the Station on West Front, near foot of Columbia
Street.For TICKETS apply at offices, No. 2 Burnet House;
Station on West Front Street, or to the offices of the
Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omnibuses run from the principal hotels, and
call on orders left at the Ticket Offices.Omnibuses for 5:45 P. M. train will leave Gibson
House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

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WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machi-
nery, &c., large Cuts for Show Cards, Posters, &c.,
executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,

Jan 8 ly 119 Walnut st., Odd Fellows' Buildin

1857.

Summer Arrangement.

1857

Cincinnati, Hamilton & Dayton
[TRUNK LINE.]

RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore
Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,
PHILADELPHIA, TERRE HAUTE,
CLEVELAND, ST. LOUIS,
DUNKIRK, LAFAYETTE,
BUFFALO, LOGANSPORT,
NIAGARA FALLS, CHICAGO,
NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M.
(Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45
P. M., and 6 P. M.LIGHTNING EXPRESS leaves at 6 A. M., for Clevel-
and, Buffalo, New York, Boston, Pittsburgh, Philadel-
phia, and all Eastern Cities, arriving at Cleveland at
4:32 P. M., in time for FIRST FAST EXPRESS TRAIN
on Lake Shore Road, reaching New York at 2 P. M.
next day. Passengers are allowed 40 minutes at Clyde
for dinner. Also connects at Cleveland with steamer
Queen of the West and Crescent City for Buffalo.Connects at Bellefontaine direct for Pittsburgh and
Philadelphia, reaching Pittsburgh at 7:30 P. M.Connects at Forest for Fort Wayne and Chicago, ar-
riving at Chicago at 10 P. M. same day, WITH ONLY
ONE CHANGE OF CARS FROM CINCINNATI TO
CHICAGO.Connects at Dayton for Springfield, Sandusky, Toledo,
Detroit, Troy, Piqua, Sidney, and all points North, East
and West.INDIANAPOLIS and LOGANSPOET EXPRESS
leaves at 6 A. M. for Richmond, Indianapolis, Terre
Haute, St. Louis, Lafayette, and all Western cities.Also, for Anderson, Kokomo, Logansport, and all
points on the Wabash Valley Road.HAMILTON ACCOMMODATION leaves at 7:30 A.
M. Stops at all regular and flag stations.MAIL EXPRESS leaves at 9 A. M.; reaches Clevel-
and at 9:10 P. M., in time for Night Express on Lake
Shore Road (and supper). Also connects at Forest go-
ing East. This train makes direct connection at San-
dusky at 6 P. M., for Toledo and Chicago. Also con-
nects at Sandusky with

"STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cin-
cinnati—being 10 hours shorter than by any other route.Also connects at Dayton with Greenville & Miami
Road for Union and all points on the Bellefontaine
Road, and with Mad River Road for Springfield and all
points on that road.INDIANAPOLIS EXPRESS leaves at 2:15 P. M.;
makes connections at Indianapolis for all points North
and West.DAYTON EXPRESS leaves at 3:45 P. M.; connects
at Dayton with train for Troy, Piqua and Sidney. Also
with train on Mad River Road for Springfield and Belle
fontaine.NIGHT EXPRESS leaves at 6 P. M.; connects a
Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia
arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M.,
in time to connect with MORNING EXPRESS Train
on Lake Shore Road. This train also connects at For-
est with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for
Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P.
M.FARE TO ALL POINTS AS LOW AS BY ANY
OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3
P. M.Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:5
6:55 and 10:15 P. M.For further information and Tickets, apply to the
Ticket Offices, Northeast corner of Front and Broad-
way, No. 169 Walnut street, near Fourth, or at the
Southeast corner of Fourth and Vine streets, or at the
Sixth street depot.

D. McLAREN, Superintendent

The Omnibuses will call for passengers by leaving
their names at either of the Ticket Offices.

W. H. SMITH Agent

WAREHOUSE

No. 5 FRONT STREET

Opposite Public Landing,
Cincinnati, O.

PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chains filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship; orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets, KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

SCHENECTADY

Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Supt.

Au16.1y



MCDANIEL & HORNER,

LOCO-
MOTIVEAND CAR
SPRING

MANUFACTURERS, WILMINGTON, DEL.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, MARCH 24, 1858.

Railroad Record

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SOUTHERN PACIFIC.

We publish, by request, in another column an article from the New Orleans *Picayune* in reference to this Company. We are also authorized to say, officially, that parties owning stock in this road, which was sold for unpaid assessments, will be allowed till April 15 to pay up the assessments and redeem their stock. The money should be sent to New Orleans and reach that city at the above date.

TEXAS CENTRAL RAILROAD.

Paul Bremond, Esq., the efficient President of this road has been compelled to retire from his official position in consequence of ill health. Mr. Bremond leaves the road with forty-two miles in operation and nearly twenty more graded.

He is succeeded by Abraham Groesbeck, Esq.

VOL. 6.—No. 5.

THE IRON PRODUCTION AND MANUFACTURES OF OHIO.

We have before us the Report of the Commissioner of Statistics to the Legislature of Ohio. It contains a full and elaborate view of the Statistics of this State, so far, as with present means, they can be obtained. Included in this is a full account of the Iron Production and Manufactures, from which we shall digest the principal features.

It is known to our readers that a bed of iron ore extend across the State, east of the Scioto, from the Ohio River to the Lake. This is part of a belt which extends almost the whole distance from Lake Erie to the Gulf of Mexico, furnishing the States of Ohio, Kentucky and Tennessee with inexhaustible quantities of Iron. In this iron region will probably be found, in another generation, some of the largest manufacturing cities of the United States.

In iron mining, there are two centers, within Ohio. The first is what is known as the "Hanging Rock Iron Region," which includes the counties of Lawrence, Jackson, Scioto, Hocking, Gallia, and Vinton. The other is on the waters of the Mahoning, and includes Mahoning, Trumbull, Stark, and Tuscarawas counties. In Trumbull county, near the Mahoning line, is found the celebrated "Black Band Iron Ore," which is smelted in the Mahoning and Massillon works. It is found, in the Mahoning works, this iron is equal to that of Lake Superior, and is not improved by mixture with it. The following is a table of the Furnaces and amount of Pig Iron produced in Ohio:

Counties.	Furnaces.	Tons of Pig Metal.
Gallia.....	1	2,000 tons.
Hocking.....	3	6,500 "
Jackson.....	12	25,000 "
Lake.....	1	1,000 "
Lawrence.....	14	27,000 "
Mahoning.....	6	12,000 "
Scioto.....	9	18,000 "
Stark.....	2	4,000 "
Tuscarawas.....	1	2,500 "
Vinton.....	5	7,500 "
Aggregate.....	54	105,500 "

The progress of iron mining in Ohio will be seen by the following comparison:

In	Furnaces.	Production.
1840.....	30	28,000 tons.
1850.....	35	52,658 "
1857.....	54	105,500 "

It will be seen that the iron production has increased more rapidly since 1850, than previously. The Report says:

"Of the furnaces above enumerated, four consume bituminous coal. One of these, in Lawrence county, made three thousand tons of iron in one year, of excellent quality. This is three times the average amount of a furnace in 1840; and one-half more than the average of 1850." Mr. Robson, of Zaleski, says: "The manufacture of merchantable iron from stone coal is just beginning to receive attention in Ohio. The Massillon Company have for some time made iron equal to Scotch pig from stone coal. The Zaleski

Company are about completing a large stone coal furnace, which will test the application of the coals of Southern Ohio to that purpose."

The Commissioner of Statistics says:

"An interesting part of the statistics of iron production is found in the support it yields to the agricultural interest. I am indebted to Mr. Conway, of Portsmouth, for an account of grain and provisions required for these furnaces. Each furnace employs constantly one hundred men, three-fourths of whom have families. There is a population, therefore, of thirty thousand persons directly engaged at the furnaces. There are, also, large numbers of men and horses required and indirectly thousands of mechanics and traders, who supply the wants of the population engaged at the furnaces. Mr. Conway states the grain and provision required thus: Each furnace requires 600 barrels of flour; 300 barrels of corn meal; 16,000 bushels of corn, and 50,000 lbs. of Bacon. Hence, fifty-four furnaces will require:

Flour.....	32,400 barrels.
Corn Meal.....	16,200 "
Corn.....	864,000 bushels.
Bacon.....	2,700,000 lbs.

From this statement it appears that each of these establishments furnish a sufficient market for its immediate neighborhood. The increase of iron being attended likewise by a corresponding increase in the manufactures of iron in the large towns, it follows that nothing can be more beneficial to the industrial interests of society, than the rapid development of iron mining.

The manufactures of iron in Ohio have increased even more than its production. "The multiplied and increasing uses in all departments of civilized life, create a constant and pressing demand for all its fabrics. Under this demand, and with the vast and various supply of raw material furnished in thirty counties of this State, the manufacture of iron has progressed most rapidly. In the year 1857, the value of iron manufactures, or the products of iron works exceeded \$7,000,000, (seven millions) in the City of Cincinnati alone, where more than fifty of the large machine shops, foundries, and rolling mills are established; and whence are exported to every state in the Valley of the Mississippi, the products of iron work to the value of several millions of dollars. The following brief table exhibits the progress of the iron business of the last thirty years, and is a fair index to the general progress of the State.

	Hands.	Value.
In 1840.....	1,250	\$1,728,549
In 1850.....	6,075	5,779,495
In 1857.....	7,000	7,000,000

Estimating the average number of women and children to able bodied men, a population of thirty-five thousand were engaged directly, and (taking into view those necessary to supply their wants,) probably fifty thousand altogether in the manufacture of iron at

Cincinnati. The imports of pig iron at this place (and iron is brought here from several States) is in the aggregate equal to one-third of all made in the State, and is sufficient to employ twenty large furnaces in smelting ore. The exports of iron manufactures from Cincinnati in 1857, exceeded those of 1847, by near one hundred per cent!

From the facts above presented, it is evident that both the raw material and the manufactures of iron exist in Ohio to a great extent, and are rapidly advancing. The value of iron products may be thus stated:

Value of Pig Iron made at \$30 per ton.....	\$ 3,180,000
Manufactures of Iron.....	20,000,000

In this business is employed altogether more than one hundred thousand persons. The iron business will undoubtedly increase rapidly, and we look forward to the time when not less than two hundred furnaces will be at work, and their product be at least half a million of tons. The real profits of iron manufactures must always be great; because iron is one of those essential staples which men can not do without. If the market be a little overstocked, the time will be near when it will demand more than can be made. The production of iron in the United States has not kept pace with the consumption, and it will be long before it can.

MARIETTA RAILROAD.

Some two months ago, the owners of a certain tract of land in the town of Athens, over which this road passes, having never received pay for the right of way, and being unable to obtain any satisfaction for their claim, took the law into their own hands, and tore up the track. For this outrage the Company sought redress in the criminal courts, and asked the Grand Jury to indict the persons who thus impeded the railroad. The following is the report of the proceedings as contained in the Athens Messenger:

"On Tuesday, Judge Nye, of Marietta, requested the Court to make a special charge to the Grand Jury, in reference to the recent removal of the Railroad track from certain town lots over which the Company had a temporary right of way by lease, since expired. The Judge made a strong argument in favor of finding indictments; he stated that it was the good and safety of the traveling public that he sought, and not that of the Railroad Company. He earnestly advised his brethren of the bar to refrain from countenancing any breach of the civil law, under any pretext whatever. He closed by saying that he was aware that he 'sounded a solitary note.'"

Mr. Welch spoke very briefly; he condemned the conduct of those who had removed the track; but he differed with his brother upon one point—he did not believe that a crime had been committed, in any sense of the case. The property belonged to the lessors, and if they took possession without doing any act by which the lives of others were endangered, and gave due notice of their intention, they were justifiable as to the commission of a crime; but they had done an act impolitic and wrong, oppressive to the Company, and injurious to the good of the community.

The Court charged the Grand Jury at some length. He took the ground that if the Rail had been torn up, in such a manner and under such circumstances as would endanger the lives or safety of passengers upon the road, it was *prima facie* a case under the Statute.

The Court did not in this matter commit himself, as to the final guilt or innocence of such parties—a defense, the merits of which the Grand Jury could not enquire into, might change the entire face of the case. The Grand Jury were to enquire whether, in the absence of a defense, the parties were guilty.

The Grand Jury retired—witnesses were examined—and they soon returned into Court, reporting five bills for selling liquor, one for riot, and one for burglary—but none for the injury referred to by Judge Nye.

The outrage complained of has been repeated, and it would seem that the railroad can not look for help to the courts. The direction of the road has evidently lost the confidence of the community. Whether this is owing to an impression that in the general wreck which their management has entailed upon the road, they have taken care to provide for debts due themselves, we will not undertake to say. The fact that they do not possess the confidence of the community, however, leaves but one course for honorable men to pursue.

ERIE RAILROAD.

We see it stated in the New York Tribune that S. F. Headley, Esq., long the efficient Superintendent of the Morris and Essex Railroad, has been selected to fill the position of Acting President and Superintendent of the Erie Railroad during the absence of Mr. Moran in Europe.

The above remark looks somewhat like a return to common sense on the part of the Directors of the Erie Railroad. We have not the pleasure of a personal acquaintance with Mr. Headley; but the fact that he has been engaged in the practical duties of an office similar to the one he is selected to fill, looks to us like the first glimmering dawn of returning reason to this long demented Company. It now remains for them to exhibit continued signs of improvement by confirming Mr. Headley's appointment as a permanent one. We should think this Company had had experience enough in experiments, especially such expensive ones as they have long been trying. The best course for them to pursue now is to quit experimenting, and take the natural and only safe course of employing plain, practical men to fill at least the working positions on the road.

MINNESOTA.

The legislature of this Territory has passed an amendment to its constitution authorizing it to issue bonds to four different Railroad Companies to the amount of \$1,250,000 to each. This is to be submitted to a vote of the people on April 15th, and will, probably, receive the popular sanction.

The Companies are to secure the State against its liabilities on their account, by each transferring to it two hundred and forty sections of the land they have received under the Act of the Minnesota Legislative Assembly; beside pledging the net profits of their roads, and giving the State first mortgage bonds on the road property to the amount of the State credit loaned.

The effect of this measure will be to hasten the development of Minnesota and increase its population and the aggregate value of its taxable property.

* PACIFIC RAILROAD IN CONGRESS.

The Committee on this question in Congress has introduced a bill to aid in the construction of a railroad from St. Louis to San Francisco. It proposes to pass through Albuquerque, the Zurilo village, and the Tegow Pass. One-half of the road to be built by the State of California, and the other half by the State of Missouri, the United States to grant money and lands to aid in building it, after twenty miles are built; five per cent. United States thirty year bonds to be issued to the States building it, at the rate of \$7,500 per mile, and so on for two hundred miles West from St. Louis, and East from San Francisco.

No bonds to be issued until each section of twenty miles is built, and the whole amount of bonds not to exceed \$30,000,000. Twenty-five miles of the road to be built and equipped the first year by each State, and thereafter no less than one hundred miles each per year. The road to be finished in ten years. The United States is to have, as a consideration for its aid, a legal right to a priority of use for all government purposes. If, when the first bonds are due, any indebtedness remains, California and Missouri are severally to pay the balance. Missouri is to begin building at St. Louis, and California at San Francisco, and proceed continuously. There are to be four branches—two North and two South.

Correspondence of Railroad Record.

ST. LOUIS, MARCH 17, 1858.

MESSENGERS EDITORS:

As a railroad center, St. Louis presents some peculiarities not shared by any other city in the Union. Situated on the west of the great Mississippi, which, at this, point is always crowded by a vast fleet of steamers, and not likely to be bridged for a long time to come, it must be the transshipping point for all property passing over the lines of railroads approaching it from any direction, and this, with the necessary reshipment of all merchandise arriving by water, must make it the terminus of a system of railways, instead of a mere passing point, or way-station, as is the case with Chicago, Cleveland, Buffalo, etc. True, the tolls thus imposed upon all property passing over the St. Louis roads will be quite a heavy tax upon its owners, and give a decided advantage to competing lines; yet the business centering here, belongs so exclusively to St. Louis, that the tax, were it even double, would not seriously affect it in any way.

But it is not St. Louis alone that is to be benefitted by this exclusive business, for her railroads will share equally in all the advantages of her position, and I shall be greatly mistaken if the Ohio and Mississippi does not receive the lions share. Indeed, such a result must almost inevitably follow, if the

managers of that road work out its true destiny—and from present appearances there are abundant evidences that they are both able and willing to do so to the fullest extent.

That the Ohio and Mississippi must become one of the greatest and most profitable lines in the country, is but repeating what has often been proclaimed in your paper. This fact, however, is now more apparent than ever, and it will not be long before it is generally known; for when we look at the map, and see the immense and rapidly populating country which, in a great measure, must be dependent upon it for a long time to come, we will see that its development can not be much longer delayed. The completion, early in the spring, of the Iron Mountain Road, opening up one of the finest mining regions in the world—and the extension of the Pacific Road to the borders of the State, which will take place within a year, will pour into the Ohio and Mississippi such a flood of business, that their present rolling stock will be wholly unable to accommodate. True, the Terre Haute and St. Louis Road will be a competitor for a share of this traffic; but the Ohio and Mississippi, from her position, must secure all she may desire or can manage.

But to obtain the full advantages of its position, this road must secure the very best possible connections in Cincinnati, such as a track through Front or Columbia Streets to the Little Miami—M. & C. and C., W. & Z.—a tunnel through Sixth Street, as you propose, or by bringing these tracks through the valley of Mill Creek into a common depot, or by again opening up the route by Dayton, Springfield and Delaware, with which line it already has a connecting track. The tax of one dollar per ton, as now paid on all property passing through Cincinnati, is a serious drawback upon the present prosperity of this road, and gives rival lines, with close connections, a decided advantage in competing for through business. This is a matter that should engage the serious attention of the managers of the road, for it takes but a simple calculation to show that every train of through freight pays two or three hundred dollars—a tax upon the connecting roads of one or two hundred thousand dollars per annum, or enough to pay the interest on forty or fifty miles of road.

I have little fears, however, that this important subject will be long overlooked by the able and experienced managers at the head of this company, or that every thing for its advancement will not be done at the right time, and in the proper manner.

Your truly, D.

During the year 1856 there were sent to the dead letter offices in England and Wales, 2,007,789 dead letters.

Railroads.

CINCINNATI, HAMILTON AND DAYTON RAILROAD.

Report of the Investigating Committee.

In accordance with notice previously given an adjourned meeting of the stockholders of the Cincinnati, Hamilton and Dayton R. R. Co. was held yesterday afternoon to hear the report of the investigating Committee, appointed by a meeting held last month.

Henry E. Spencer, Esq., chairman of the previous meeting, presided.

Wm. Greene, Esq., Chairman of the investigating Committee, read the following report:

COMMITTEE'S REPORT.

Two duties are devolved upon your committee by the resolutions under which they were appointed:

1. To consider and report upon the communication of the Board of Directors, detailing the difficulties existing between this company and the Lake Erie and Mad River Railroad, and,

2. To examine into the general condition of the company, its management, and future prospects.

1. Touching the difficulties with the M. R. R., the facts seem to your Committee to be about thus: That on the 16th August 1852, in a general contract for running arrangements between the two roads, an article (the 9th article) was inserted, stipulating and providing for the building of two steamboats to run on Lake Erie in connection with the two roads; that the interest and cost of these boats in the roads respectively, should be in proportion to the respective length of the two roads—making 71½ per cent to the M. R. R., and 28½ per cent to this Company; that the boats were built and put in use as agreed; this Company furnishing its share of the money in cash, and the M. R. R. borrowing their share of certain of its stockholders in the East. That after a trial of a year or two in running the boats, the investment was found to be unprofitable, and the boats withdrawn, to be disposed of by sale or otherwise. That a sale of one of the boats—the Mississippi—was effected by the agent of the M. R. R. in Boston, on the 1st of January, 1856, for \$100,000; but the proportion of the money due this Company—say \$28,500—was withheld. That payment thereof has been repeatedly demanded and refused; and being so refused, the Directors of this Company, as indemnity, retained some \$20,000 of money, which would otherwise have been paid over to the M. R. R. as their share of the joint earnings of the two roads, received by this Company in Cincinnati, during the months of October, November and December, 1856. The justness of the claim of this Company to its share of the \$100,000, in the sale of the Mississippi, is not disputed; but in an interview between this Committee and the President, and one of the Directors of the M. R. R. it was claimed by the latter gentleman, in the first place, that the claim should be made, not of the M. R. R., but of the agents in the East, who sold and received the money for the boat; and, in the next place that even if the claim were legitimate against the M. R. R., the retention by this company of funds received in the course of business for a joint account, was an inequitable, unusual and improper mode of realising it. The first of these points was placed upon the ground, that the gentlemen

who sold the boat and received the money was equally the agent or trustee of both the roads. Your Committee, however, from anything that has been shown to them, cannot recognize the truth of this assumption. All that your Committee find in the matter of agency is this: that, in the original contract for the building of the boats, the Presidents of the two roads were appointed Trustees for the management of them. Subsequently, for some formal reason, unconnected with the substantial relations and interests of the parties, it was agreed that the boats should be registered at Buffalo, in the names of Messrs. Henshaw and Fay. Mr Henshaw was the treasurer of the M. R. R. The Mississippi was sold by him for 100,000, in Michigan Central Bonds, and the money realized thereon at par. This money has been retained by him to the full amount of it, as indemnity for alleged large advances to the M. R. R. So far as the claim of this company is concerned, the committee are satisfied that the Treasury of the M. R. R. received the \$100,000, and is consequently, answerable to this company for the share to which it is entitled in the sale.

The second point presented by the gentlemen of the M. R. R. at the interview referred to, viz: that the retention was, in any event, inequitable, &c., your Committee, believe is deprived of all its force by the fact, that nearly or quite a year had elapsed before any serious objection was made to such retention, or demand made for the payment of the money.

The force of the point, it will be observed, consists in the assumption that the current earnings of a road may be indispensable to the maintenance of its operations from day to day; and that hence, by an assumed common usage in railroad settlements, from time to time, the current balances from working receipts, shall be excluded from all claim on the score of a general indebtedness. The lapse of a year, however, in the case in hand, before any demand was made, the M. R. R. in the meantime continuing its operations without any assertions of the necessity of the money withheld as means for the current maintenance of the road, is believed to take the case out of the rule which might have otherwise required that the withheld money should be paid over. The lapse of time affords an additional strong claim in favor of this Company, from the inference it affords of presumed assent on the part of the M. R. R.

Whether your Committee, however are right or not, in the view thus presented, of the proper rights of this Company in withholding the \$20,000, they cannot but regard the question, at least, as one of those about which honest minds may differ; and in this view, that the dispute should be regarded as a proper subject for adjustment, either by judicial litigation, or by amicable reference. Either of three courses might be adopted without interfering with the usual harmonious arrangements of the roads. In this connection, your Committee is satisfied that every fair offer has been made, and is now made, for such an adjustment as that intimated, in either alternative that the M. R. R. might adopt. The unqualified refusal of that road, thus far, to meet this Company on that ground, is in every bearing, much to be regretted. Nevertheless, your Committee is of opinion that some very extraordinary motive of interest should exist to justify the concession required, while the claim of the M. R. R. is considered by this Company as more than doubtful. Whether such motive exist or not, your Committee would not attempt to judge.

Your Committee cannot take leave of this difficulty with the M. R. R. without expressing their deep regret at its occurrence, their opinion of its essential injury to both the roads, and their hope that some mode may at an early day be hit upon for its adjustment; or, at least, that some compromise may be affected by which the usual running arrangements may be resumed. The importance of such an adjustment, as well to the M. R. R. as to this, is greatly enhanced by the fact that a contract, made some months after the original retention of the \$20,000, exists in full force between these two roads and the Pittsburgh, Fort Wayne and Pittsburgh roads for a through line between Cincinnati and Pittsburgh, which makes that part of the M. R. R. between Springfield and Dayton indispensable to the mutual use of these two roads, and of course to the fulfillment of the contract with the other parties.

II. The second duty devolved upon your committee, is to "examine into the general condition of the Company, its management and future prospects.

On the first of these points of examination your committee will arrange what they may have to say, under three distinct heads:

1. The present condition of the road, and its various appurtenances.

2. The assets and liabilities of the company.

3. Our relations to other roads

1. Your committee devoted an entire day, with a special train, to a personal inspection of the road, over the whole distance from Cincinnati to Dayton. The result of a particular examination of the road bed, rails, bridges, depots, work-shops and station houses was eminently satisfactory. The construction of the road and of the appurtenances, is of the most solid materials, in the most durable forms, and the most workmanlike execution. Your Committee were impressed by the appearance of permanency, which marked every feature of the work; and they feel that they would do less than justice to the Engineer, and to all other parties connected with the construction of the road, to express less than their entire satisfaction with it. The work, comparatively recent, at the connection with the Ohio and Mississippi Railroad, west of Mill Creek, is thought worthy of particular commendation, partaking as it does of the substantial character which belongs to the road generally, in addition to the skillful adjustments of rail and ground, for the accommodation of any amount of freight business between the two roads, which may exist for many years to come.

In further remarking upon the general condition of the Company, in especial connection with the cost of construction and equipment of the road, and subscriptions to other roads, your Committee feel bound to express the opinion, that the original construction of the road was of too expensive a character. That much more real estate was purchased than experience proves to have been needed; that too much money has been expended in stocking the road; that subscriptions to other roads and steamboat lines have been made with doubtful expediency, and with decided loss, and that the very considerable expenditure for double track was premature and unnecessary. In referring to these points, however, of what the Committee regard as errors of judgement, they cannot overlook the fact that at the outset of the work all hands were new; that railroad building in the West was yet in its infancy; and that occasional mistakes—

the necessary results of inexperience—must be expected and submitted to as a part of the cost of a great work in a new and comparatively untried form of enterprise. Your Committee would also add, in regard to the surplus real estate, that it is estimated to be now worth double its cost; and in regard to the surplus stocking of the road, they believe that an early new arrangement with another road, of which the Committee will speak in another place, may give full employment to all such surplus equipment. The day, too, in the opinion of your Committee, is not far distant when the double track now laid down, but which might have been postponed, will be found to have been only a short time in advance of the necessities of the road.

2. The assets of the Company have received the particular attention and minute examination of your Committee, and their value been carefully estimated. A statement of them, with the liabilities of the Company, is appended hereto. The bonded debt of the Company amounts to \$1,427,000, the floating debt to about \$156,000. Assets, however, considered good and not remotely available, may be applied to this floating debt, so as to reduce it to \$49,000. From the data afforded by the appended tabular statements of assets and liabilities, each Stockholder may form his own opinion of the present value of his investment in the Company's stock.

3. The relations of this Company to other Roads.

The subscriptions to aid in the building of other roads, on the part of this Company have been as follows:

1. To the Greenville & Miami.....	\$10,000
2. " Dayton & Michigan.....	90,000
3. " Springfield & Columbus, via London	40,000
4. " Cin. Logansport & Chicago.....	225,000
5. " Junction.....	200,000

The first two of these subscriptions are regarded as judicious and profitable.

The third, contemplating a continuous road, independent of the Columbus & Xenia road, to enter at the south end of Columbus, was rendered of no effect, for its ultimate object, by a larger subscription of the Columbus & Xenia Road, by which the contemplated new road was stopped at the junction of the Columbus & Xenia Road at London. Your Committee, however, are informed that it was agreed by parties interested, that the subscription of \$40,000 should be refunded to this company, which has not yet been done.

The fourth was a subscription, stipulating to pay \$100,000 in machinery, at the opening of the road, and \$125,000 on such time as that the probable future earnings of this company, from the business of the road when opened, could furnish the means to pay it. The subscription, however, is believed not to be sanctioned by law, and as your Committee are advised, may be regarded as void, and is so treated by the Board of Directors.

The fifth was a subscription in commutation of an agreement to build so much of the Junction R. R. line as laid within the State of Ohio; which would have cost much more than the subscription. The larger part of the subscription was paid by the bonds of other Roads and real estate at a large advance upon the cost.—Of the present and prospective value of the stock, your Committee could express no opinion. Of the early completion of the road, its projectors and present managers feel the strongest assurance. It is ready to receive the superstructure (as your Committee are informed) as far as Connerville, and when completed to Indianapolis, will as its friends believe, bring a through and local business to

this Company which would more than compensate for the subscription, though the stock should be entirely sunk.

From this general view of the relations of this Company with other roads, your Committee would invite particular attention to the Dayton and Michigan Road.

This road is a direct continuation of the Cincinnati, Hamilton and Dayton Road, in a nearly due north direction towards Toledo, at the head of Lake Erie. It is already completed as far as Lima—130 miles from Cincinnati, and 70 miles from Dayton. At Lima, it joins the Pittsburgh, Fort Wayne and Chicago Road. Its eventual terminus will be Toledo, 70 miles from Lima, making in the whole 200 miles from Cincinnati—the nearest route to the Lake from that city, by many miles. The completion of the D. & M. Road to Toledo, (which, from the present condition of the work, it is believed may be effected in the course of the current year) with such running arrangements with this Company, as to make the two Roads in effect identical, would secure to this Company an amount of business which it would be difficult to estimate. The entire line from Cincinnati, being made shorter than any other to the Lake, and the expense of transportation, up and down the Lake between Toledo and Buffalo, being the same as between Cleveland and Buffalo, would, during the navigable season, have a preference, in connection with Eastern freighting business, in both directions, over every other competing line. The Road from Toledo to Detroit, also, being 56 mile in length, and now in full operation, forms, with the C. H. & D. and the D. & M. Roads, a continuous line of 256 miles from Cincinnati, which, there being no rival line, must necessarily command all the trade between that city on the South, and the whole of Southern Michigan on the North. The further junction at Detroit with the great Western Railway of Canada, opening a route from Detroit to Niagara Falls and Montreal, within a few miles as short from Cincinnati as that of any other existing line, and passing through one of the most beautiful countries in the world, insures a certainty of passenger business from Cincinnati to the East which must ultimately give it equal, if not superior returns of profit, as compared with other lines. The junction of the line also at Lima with the Pittsburg, Ft. Wayne and Chicago Road, cannot fail to yield a good share of Eastern through business by way of Pittsburgh, and of Western by way of Chicago. In view of the advantages thus imperfectly referred to, to be derived from a connection with the D. & M. Roads, your Committee recommend such an arrangement with that Road as shall insure such connection; provided no further pecuniary aid should be required than such as may be afforded by a suitable proportion of such future earnings to this Road as the connection should be found to afford. The detail of such an arrangement as should be necessary to carry out the suggestions of your Committee, whether in connection with the use of the surplus rolling stock of this Company in the operating of the D. & M. Road share of the line, or in any other way, may be left with the Board of Directors to adjust, under the qualifications recommended in regard to direct pecuniary aid.

Before leaving the subject of our relations to other roads, it may be expected that your Committee would say a word of our past connections with the Little Miami. A valuable arrangement for "through business," for the

mutual benefit of the two roads, which existed for some time, was suddenly discontinued. A contract had been entered into on the 15th of April, 1853, between the Cleveland, Columbus & Cincinnati Road, the Columbus & Xenia, and the Little Miami, on the one part, constituting what was called in the contract "the East line," and the Cincinnati, Hamilton & Dayton Road, the Mad River Road, and the Junction Road on the other part called in the contract "the West line," the purpose of of which contract as declared in the first article of it, was, to transport passengers and freights between Cincinnati and Cleveland, either by the Railroads of the first three parties; and also to transport passengers and freights between Cincinnati and Sandusky. In the carrying out of this arrangement on the part of the West line, they used their two boats, the St. Lawrence and Mississippi, for the transportation of their passengers and freights from Cleveland to Buffalo. The right of the West line, under the contract, to sail these boats from Cleveland for the purpose named, was denied by the East line, which contended that they should be sailed only from Sandusky. In consequence of the failure of the parties to adjust this difficulty, the arrangement between them for through business was entirely discontinued. In justice to the Directors of this Company, and to the truth of the case, as well as to correct erroneous impressions believed to be injurious to this Company, your Committee have thought it their duty to examine into the merits of this question, and to communicate their views upon it.

It would seem then to your Committee that if the sailing of the boats from Cleveland, were a violation of the contract, as contended for by the East line, it should appear to be so either from the terms of the contract itself, or from the reason and justice of the thing.

I. As to the contract itself, four points are regarded by your Committee as important to the question.

1. By the express terms of the contract, Cleveland is the Northern terminus of both the lines. The contract is to transport passengers and freights "between Cincinnati and Cleveland," by both lines.

2. The third article of the contract expressly provides for "boat allowance" in the fare bill from Cleveland to Buffalo, "by either line,"—a provision which would seem meaningless, unless both parties were to be at liberty to sail from Cleveland.

3. The 9th Article of the contract provides that the contract shall take effect on ten days notice by the Superintendents, "that the boats in connection with the West line will commence their regular trips"—a distinct recognition, certainly, that the West line was to use boats *some where*. The question where, or between what places they should be used, must necessarily be decided by the West line itself, unless some restrictive stipulation intervene to decide for them. No such restrictive stipulation appears in the contract; and,

4. The Junction Road, between Sandusky and Cleveland, not being completed at the time of the making of the contract, it was provided in the 9th Article that until that road should be completed and in operation, it should be lawful for the parties, (meaning of course the West line,) to maintain their through business upon the Norwalk and Toledo Road, which would carry them to Cleveland *without touching Sandusky*. This provision would seem conclusive that Cleveland, and not Sandusky, was alone regarded

or thought of as the proper terminus of the West line, as it was of the East line.

II. As to the reason and justice of the thing: this would seem to make all in favor of the right of the West line to sail from Cleveland.—They have carried their loads of passengers and freights there, for a destination further East; and, it would seem a most strange and culpable omission, as a business matter that they should have made no provision for the accommodation of their business for that further destination.—What shall be done with these loads of passengers and freights on their arrival from day to day at Cleveland? Shall they be left there to be taken care of by chance? or shall the further profit of the business be given to some other Company? or shall not this Company, rather with its means at hand, do that further business itself? These questions answer themselves. The East line have doubtless made some arrangement for the transportation of their passengers and freights from Cleveland, and why should not the West line do the same?

In the judgment of your Committee the supposition need not be a very improbable one that, in arranging the 3d and 9th articles of the contract, the first, alluding to "boat allowance" in the fare bill from Cleveland, and the other to the time of the running of the boats of the West line, it might have been contemplated by all the parties, that the two boats of the West line should be employed *in common*, by both the lines, in the transit to Dunkirk or Buffalo. The provision for "boat allowance," from C. to B, in the 3d article, would certainly imply that boats, *on some foundation*, were to take up the two lines for Eastern transit on their arrival at Cleveland; and as the only boats in commission at the time of the making of the contract were the two boats of the West line, and as they were expressly referred to in an important connection in the 9th article, it certainly would not be unreasonable to suppose that these boats were at the making of the contract in contemplation of the parties, for *common use*. There is, as your Committee think, but one other way of accounting for the provision for "boat allowance by either line," in the 3d article; and that is, that it may have been the intention of the East line, in due time, to have boats of their own; and that in that reference a provision was important in fixing the boat fare from Cleveland to Buffalo, on the same principal that it was important to fix the *road* fare for the two lines from Cincinnati to Cleveland; so that, in effect, the mutual running arrangements between the two lines, should have their terminus at Buffalo instead of Cleveland.

It may be proper for your Committee to add, that the provision in the first article for transportation of freights and passengers between Cincinnati and Sandusky, seems to be entirely independent of the provision in the same article for transportation between Cincinnati and Cleveland; and that the only reason for introducing it at all into the contract was an inducement to a provision in the fifth article, stipulating that the prices of transportation between Cincinnati and Sandusky, and between Cincinnati and Cleveland, shall be the same. The obvious intent of this provision was, to prevent the West line from getting any advantage in its business over the East line, by cheaper rates of transportation from Sandusky than from Cleveland.

If the views thus presented be well founded, your Committee cannot but conclude that the

order of the Superintendent of the East line, given to the General Agent on the 1st of May, 1854, (which was the commencement of the difficulty between the two lines) "not to sell tickets to Buffalo, Dunkirk or New York, via Ohio City and Lake steamers, until further ordered," was not authorized by the right of the case, was in violation of the contract on the part of the East line, and properly resisted by the parties of the West line.

While your Committee, however, have clearly come to the opinion that this Company did nothing in the premises which, by the contract, they had not a legal right to do, they freely express their regret that the running arrangements, so beneficial to both the contracting parties, were broken off; and they cannot but think that, with mutual explanations and forbearance, they might have been continued; and your Committee trust and hope the Directors of both the lines, shall so far regard the importance of some mutual arrangement for the through business with the East, as to insure a reconsideration of these points of difficulty, and a satisfactory settlement of them, either by themselves or by arbitration, and in the event of a renewal of their joint relations, your Committee trust that such a course may be adopted as shall, if possible, prevent a recurrence of such misunderstandings; and your Committee would be understood as applying these suggestions of harmony to our connections with all other roads,

2. The *management* of the road may be considered under three heads:

1st. The mode of keeping the accounts.

2d. The police of the road, with special reference to prevention of injuries either to persons or property.

3d. The economy of expenditures, with special reference to daily current expenses, and compensation or salaries to the various employees of the road.

1. Your committee have examined the books with care, and find the manner in which they are kept to be good and practical, and well calculated to guard against errors. The mode of receiving and disbursing monies would seem to prevent the possibility of any serious discrepancies. A weekly balance sheet is taken from the books, and entered in a book of records. A monthly statement is also taken off by another person. All these are kept for the inspection of those interested.

2. Of the Police of the road, having reference to the prevention of injuries to persons or property, your Committee could not speak in too commendatory terms, especially in connection with the bridges. Every bridge is guarded by watchman, with ladders and water vessels, for the extinguishment of fire at every passage of a train of cars. A single bridge only has been burned, and that by a convicted incendiary, and but a single life lost of a passenger, since the commencement of operations on the road.

3. Your Committee have scrutinized with care the current expenditures, in the form of daily expenses and salaries. The pay rolls have been examined, and in all respects found satisfactory. The salaries to the various employees, a tabular statement of which is herewith presented, are believed throughout to be fair and moderate.

Of the general management of the affairs of the Company, whether in reference to the accountability of the various officers, the safe-keeping and proper appropriation of the funds, or the general fidelity with which the various duties have been discharged, your Committee deem it due to the Board of Directors, their officers and employees, to say, that every thing which has come to their knowledge indicates entire fairness and integrity.

To prevent a recurrence of any future difficulties or complaints in regard to aids in the form of subscriptions to stock, or otherwise, to branch roads, or any considerable expenditures for any purpose whatever, foreign to the general and necessary conduct of the business of the Road, your Committee recommend that, in all cases where appropriations in such particulars shall be called for, nothing shall be done by the Board, but upon an express authority of the Stockholders, at a meeting to be called for a specific purpose; the Stockholders being previously notified of whatever that purpose may be, as the special object of such meeting.

Your Committee further recommend that the further construction of the double track be entirely suspended; that the surplus rolling Stock be so disposed of as not to be a charge upon the Company without any compensating advantage; that no more dividends be made, either in Scrip or Stock, or any dividend whatever, until all floating claims against the Road shall be fully discharged; and then, only, from the actual net earnings of the road.

The policy and propriety of this course must be apparent to all. A rigid adherence to it will assure every stockholder, that he is receiving the legitimate fruit of

an investment, whenever a dividend is made, and that the capital upon which it has been declared, is, beyond all peradventure, good, after such dividend shall be paid.

Your Committee further recommend that the \$300,000 of bonds, prepared and not yet issued be continued to be held by the Board of Directors until their issue shall be advised by the stockholders.

Your Committee finally recommend, that at every annual meeting, a committee of stockholders, not being at the time Directors, be appointed to investigate and report upon the condition of the road, and the state of the finances.

Of the future prospects of the road, which is the third point upon which the committee are directed to report, it would be difficult to speak, without a direction with the prospects of the country. This great valley has but just begun to put forth its power in the teeming abundance of its agricultural wealth. The position of this Company, as a leading instrumentality for the transmission of this wealth to its proper markets, is unsurpassed by that of any other Road in this section of the country. Its local business might always be relied on for fair remunerative dividends upon its capital. This must be regularly increasing in a ratio difficult to estimate, with the constantly increasing developments of the soil, and the contributions of tributary Roads, to which these developments must be as constantly giving birth. The advantage to this road from the completion of the D. & M. Road to Toledo, both in passengers and freight, may be regarded as a clear gain upon the original estimate of profits for the Road.

The Junction Railroad, when completed, passing through one of the richest agricultural regions of the West, can not fail, as has been already intimated, to contribute materially to the freighting and passenger business of this Road. And the final completion of the Pittsburgh connection, through the Delaware and Mt. Vernon line, will give an entirely new source of revenue from a thorough business with the East. On the whole, however depressed the market value of the stock may have been, under the operation of influences, which have really had no connection with the intrinsic value of the road, your committee are persuaded, that, but a few years will have elapsed, before a new estimate will be placed upon the stock, which shall give it a high rank among the Railroad investments of the country.

Your Committee conclude their report by tendering to the officers of the road, appropriate acknowledgments for the prompt readiness with which they have responded to every call of the committee in the long and laborious investigation through which their duties have led them. By order of the Committee,

WILLIAM GREENE, Chairman.

Statement of the Condition of the Cincinnati, Hamilton and Dayton Railroad, exhibiting the Property and the Available Assets of the Company, and its Liabilities, on the first day of March, 1855.

PROPERTY, &c.

Under the head of "Construction Account," there is charged as the original cost of the road, as per returns of R. M. Shoemaker, Engineer, on the 1st April, 1852, \$1,527,542 93

For right of way and land damage to the same date..... 101,244 14

For salaries of officers, &c., do 13,424 14

For legal expenses, do 4,645 00

For expenses of offices &c., do 5,442 14

For interest and discounts, do 99,495 62

Apparent cost of the road on the 1st of April, 1852.....\$1,751,793 11

To the same account there have been charged, from that time to the 1st of April, 1857, the following additional items:

For graduation, masonry, bridges, legal salaries, &c., principally second track.....\$152,054 50

For superstructure, including iron, principally second track..... 175,203 61

For lands, land damages, station houses and fencing... 227,366 55

For engineering expenses..... 7,705 00

For second track, in completion of same..... 111,200 67

For interest and discount on bonds... 211,689 70

885,220 03

(And from the 1st of April, 1857, to Mch. 1, 1858:)

For am't paid Ohio Life Ins. & Trust Co., as a guarantee on bonds sold to them..... 16,000 00

For the Ohio and Mississippi Rail road connection... 6,637 00

For right of way.... 278 17

For corn-house at Schenck's station, and sundry small items..... 525 85

23,441 02

Total amount charged as cost of road.....\$2,060,454 16

From which is to be deducted, for sale of right of way and tracks to the Dayton and Western Railroad Co., at Dayton..... 12,570 28

-\$2,647,883 88

Balance of construction acct. under the head of "Equipment," &c., there is charged for Locomotives, Cars, Machinery, &c..... 506,292 35

Real Estate—being purchases made for depot grounds, and other railroad purposes, including that also which is now held subject to sale, (see opposite.)..... 263,450 54

R. R. & OTHER STOCKS, BONDS, &c.

Dayton & Michigan R. est. val. R. Stock..... \$ 90,000 4,500 00

Junction R. R. Stock... 200,000 10,000 00

Springfield & Col. R. R. Stock..... 40,000 ..

Richmond & Miami R. R. Stock..... 4,500 1,000 00

Dayton & Western R. R. Bonds..... 26,000 19,500 00

Middletown Bridge S'k 500 500 00

Whitewater Canal Scrip 355

\$261,355 35,500 00

Bills Receivable—Notes, &c., on hand deemed to be good. 69,521 58

Bank Deposits—Balances.... 5,482 45

Cash—On hand, not deposited 2,355 16

Due from other R. R. Cos..... 5,165 19

Due from individuals..... 10,574 35

Balance in hands of Carlisle and Stedman, N. Y., to pay interest on Bonds..... 3,390 50

Balance in hands of Frank S. Bond, N. Y., to pay interest on Bonds..... 6,612 38

Fuel on hand, and stock in workshop..... 30,980 87

Steamboat "St. Lawrence"—estimated value, \$50,000, of which this Co. owns an interest of 28 1/2 per cent..... 14,250 00

Total amount of Assets.....\$3,601,459 25

LIABILITIES, &c.

Capital stock of Company.....\$2,152,900 00

Bonded Debt, 1st mortgage..... 477,000 00

2d " .. 950,000 00

1,427,000 00

Bills payable, outstanding notes, &c..... 69,054 00

Unclaimed dividends, balance of dividend account. 1,714 50

Dividend No. 5, (scrip) and interest on same..... 19,514 85

Unpaid Coupons of 1st mortgage bonds..... 453 00

Unpaid Coupons of 2d mortgage bonds..... 12,670 00

13,125 00

Due to other R. R. Companies including amount in dispute with Mad River R. Road..... 21,969 41

Due to individuals..... 9,805 03

Unsettled Bank balances in New York..... 10,891 65

Total amount of liabilities.....\$3,745,874 44

To meet this am't in part the value of the Real Estate which is set down in the Assets at \$263,450 54, is considered as having appreciated in value to an extent equal to the difference between the Assets and Liabilities—and that the am't held subject to sale, and not required for the purposes of the Road, would realize to the Company, at least..... 144,415 19

NOTE.—The rolling stock of the Company as exhibited under "Equipment Account," being altogether greater than is required, unless some advantageous arrangement can be made for stocking some connecting road, a portion might be disposed of, perhaps equal to \$150,000.

In the foregoing statement no account has been taken of the income or net earnings of the road since the 1st of September last, which is deemed more than adequate to meet the accruing interest on the Bonds.

The floating debt of the Company, after deducting available assets not yet due, is,

as stated by the President in his report to the stockholders, a fraction less than \$50,000.

The estimated income of the road for the year ending March 31, 1855, is...\$450,000 00

And the current expenses for the same period..... 222,462 00

Net earnings to pay interest on bonds and extinguish floating debt.....\$257,538 00

It is believed by the committee that the earnings of the road will be uniformly increasing, which, with decreased expenditures in the future, will not fail to produce remunerating returns on the entire investment.....\$3,601,459 25

Exhibit of the Salaries paid to Officers and others in the employ of the Cincinnati, Hamilton and Dayton Railroad Company.

President.....\$3,000 00 per annum.

Superintendent..... 2,000 00 "

Secretary..... 1,500 00 "

Master of Transportation..... 2,000 00 "

Paymaster, who also acts as Civil Engineer and Conductor on the Hamilton train..... 900 00 "

Foreman of Work-Shop..... 1,200 00 "

Passenger Conductors..... 75 00 per month.

Freight do 60 00 "

Engineers..... 60 00 "

Clerk and Book-keeper in Work Shop..... 65 00 "

Clerk and Book-keeper in Freight Department..... 65 00 "

Firemen..... 33 00 "

Laborers in Depot..... 1 00 per day.

Hands in Work-Shop..... 1 10 to 2 25 "

Agent at Dayton..... 1,200 00 per annum.

Agent at Hamilton..... 800 00 "

Ticket Agent at Hamilton..... 600 00 "

Agents at other Stations..... 25 00 per month.

Watchmen at Bridges, &c..... 1 00 per day.

Average monthly amount of pay Roll, \$8,500.

On motion, the report was accepted, and a vote of thanks was tendered to the Committee.

Mr. John W. Owens moved that the report be adopted and printed.

Mr. Joseph Torrence, inquired if the Committee had taken into consideration disputes with connecting roads, other than the Little Miami.

Mr. Greene replied, that the purpose of the Committee was to obtain all the information possible, and report the facts deemed important to the stockholders. The disputes with the Little Miami and Mad River and Lake Erie Companies had been reported upon. With regard to the alleged disagreement with the Hamilton & Eaton Company, it was found that no difficulty now existed, and none of a serious character had been experienced.

Mr. Jones remarked that he did not deem it necessary to print the report. It would be sufficient to file it, and stockholders not present, could have access to it.

Mr. John K. Green spoke in favor of printing. The Bears desires its suppression, but stockholders that might find it necessary to sell would be benefited by its publication.

Various speakers referred to the Bears in terms not complimentary, when Mr. N. Longworth remarked that Bears had better not be offended. They had long teeth and would bite.

The motion to adopt and print was carried, with only one or two dissenting voices.

Mr. Shiras moved the appointment of a Committee of five Stockholders, to recommend Directors to be voted for at the next annual meeting.

Dr. Fore opposed this motion. He could not approve of attempts to create a fuss.

Mr. John Young said he felt perfectly competent to select Directors for himself—was opposed to dictation, and desired to know why the motion was made.

Mr. Shiras said he had twice attended the annual election of this Company, and in each case he found a ticket prepared. The Company had heretofore been controlled by proxies, and he wanted local stockholders to have something to say.

Mr. Wm. Greene wanted to know if any body supposed such nominations would be binding upon any stockholder?

Mr. Jones said, of course the nominations would not be binding, but he favored the mode of nominating proposed, and in support of the motion, referred to the manner in which elections for insurance directors, &c., were conducted. He then moved to amend by adding the President of the Company to the Committee.

The amendment, and also the original motion, were voted down, almost unanimously.

The meeting then adjourned.

[NOTE.—Mr. Robert Brown, one of the investigating committee, dissented from that clause of the report referring to a controversy with the Little Miami Railroad Company.]

HEMPFIELD DIRECTORS.—At the annual election for Directors of the Hempfield Railroad for the ensuing year, the following persons were elected:—C. M. Reed, Wm. McKenna, Washington; James C. Acheson, Thomas Sweeney, S. Brady, Wheeling; J. C. Clark, Westmoreland Co.; Daniel Deal, Philadelphia.

RIGHTS OF BONDHOLDERS.

We give below the decision of Judge McLean, of the United States Court, in a case of great importance, as settling the rights of bondholders. The Cleveland, Columbus & Cincinnati Railroad guaranteed the bonds of the Columbus, Piqua and Indiana Railroad Co. to the amount of \$400,000. When the latter Company failed to pay its interest, the responsibility attaching to the guaranteed was attempted to be removed by an application on the part of some of the stockholders of the Cleveland, Columbus and Cincinnati Railroad to the courts for an injunction on the ground that the Directors of the Company had no right to give the guaranty. The injunction was granted and has now been dissolved by the higher courts. The decision is one of great interest and importance. We give it entire:

Christian A. Zabriske vs. The Cleveland, Columbus & Cincinnati Railroad Company, John A. Butler and others, bondholders.

This case is important, whether we regard the amount of responsibilities assumed by the Cleveland Company, the construction of the corporate powers it exercised, or the ground on which relief is claimed by the complainant.

The defendant was incorporated by the act of 14th March, 1836, and that act having expired, was revived by the act of the 12th of March, 1845. This act fixes the northern terminus of the road at Cleveland, and "thence to run towards Columbus," with power to unite with any other road leading from Lake Erie towards the southern part of the State; and to make the road for the whole original distance or a part of it, according to the discretion of the Directors.

This charter was amended by the act of 8th February, 1847, which gives power to the Directors to construct side branches, or auxiliary roads, &c., and releases the Company from going to any intermediate point. There was a further amendment of the charter 8th February, 1849, which provides that after the expiration of thirty-five years from the time the road is completed, the State may purchase it.

The Company was created a body politic and corporate for the purpose of constructing the railroad. The ordinary powers were conferred to obtain subscriptions of stock, elect Directors, locate the road, procure the right of way, borrow money, give mortgages on the road, including tolls and every other power necessary to build the road, equip it, and put it in operation. No question arises as to the exercise of any of these powers. But some years after it had commenced a successful and profitable operation, the Company indorsed the bonds of the Columbus, Piqua and Indiana Railroad Company, to the amount of four hundred thousand dollars, which Company had become insolvent and was unable to complete the road under its charter, from Columbus, by way of Urbana and Piqua, to Union, in the State of Indiana. This road connected with that of the defendant's at Columbus. These responsibilities were incurred, which, in the complainant's bill, are alleged to have been unauthorized by the charter, or by laws adopted by the company.

The complainant being a large stockholder, set forth in his bill these unauthorized acts by the Company, and prayed that it might be enjoined from paying any money, or any thing whatever in satisfaction and discharge of the interest now due, and of the interest and principal to become due, on said four hundred bonds, or any part thereof; and such other and further relief as may be equitable. A temporary injunction was allowed.

In its answer, the defendant claims authority, under the fourth section of the act of 3d March, 1851, to make the guarantee complained of in the bill, and it admits that such contract was entered into as charged in the bill, and alleges that a meeting of the stockholders being called, under the 4th section of the above act, on the 1st July, 1854, and having before them the contract of March 7th, 1854, entered into by the direction of the Board of Directors, on the 6th March, 1854, with said Neil and Dennison, as charged in the bill, was unanimously approved and sanctioned by the stockholders.

John A. Butler, Thos. Belknap and Wm. A. D. Culender, being bondholders, and admitted to defend themselves, say that they are bona fide purchasers of the bonds at the market price, without notice of any fact or circumstance which would excite suspicion or inquiry as to the validity of the bonds, or that they were not, in every respect, issued conformable to law. They purchased their bonds, with the coupons attached, in March, 1855, on which said bonds the guarantees were endorsed; that at the time of their purchase the bonds were current, and met ready sales in the city of New York.

It is alleged the 4th section of the act of 1851 has been repealed by the subsequent act of the 1st of May, 1852.

In the subsequent act, the 4th section of the Act of 1851 is embodied, but it contains no repealing clause. If there be a repeal it must be by implication, and it would seem from the Constitution of 1851 there can be no such repeal.

The sixteenth section of second article of the Constitution declares "no bill shall contain more than one subject, which shall be clearly expressed by its title: and no law shall be revived or amended, unless the new act contain the entire act revived, or the section or sections; and the section or sections so amended, shall be repealed."

There is some obscurity in this provision, but the intent is clearly perceived. A deliberate consideration of each act, was intended to be secured, in limiting the bill to one subject, which is required to be clearly expressed by its title; and then to prevent a hasty or inconsiderate action, "no law shall be revived or amended," unless the new "act contain the entire act revived or the section or sections amended." This leaves no room for implication, as the fact of intention must appear. In the case before us, the fourth section is copied in the new act, but there are no words of repeal.

This provision of the Constitution can not be held to be directory only, to the legislature; as it enjoins positive acts, which must be patent on the face of the new act. These can not be dispensed with in the amendment or repeal of a law. The provision, if regarded, must prohibit the repeal of a law by implication.

The thirty-second section of the act of 1852, provides that "any existing railroad corporation may accept the provisions of this act," but, it is not shown that this has been done by the defendant, and its provisions do not embrace prior corporations. The act of the 13th of March, 1851, is a general law, and applies to all railroad companies, enabling them to exercise certain powers beyond their chartered rights, under the limitations expressed. The power of the Cleveland Company must depend upon the provisions of this act.

The complainant contends that the fourth section of the act of 1851, so far as it is relied on by defendant, is unconstitutional and void. This section authorizes any incorporated railroad company to subscribe to the capital of any other company, or otherwise aid such company, in the construction of its railroad, for the purpose of forming a connection of the said last mentioned road with the road owned by the company furnishing such aid." Provided that no such aid shall be furnished until a meeting of the stockholders of each of said companies shall have been called by the Directors thereof, at such time and place, and in such manner as they shall designate, and the holders of at least two thirds of the stock of such company represented at such meeting, in persons or by proxy, and voting thereat, shall have assented thereto."

That a private charter which grants certain rights and privileges to individuals, on consideration that they have done, or will do, certain specified things promotive of the public interest, is a contract, when accepted, no sound mind will controvert. And it is not only common learning, but the common understanding of business men, that a corporation, being an artificial existence, is limited by its created powers; and that this includes all its substantial attributes, omitting those only which are incidental and formal; and in this country it is a well understood axiom, that the legislative power having made the contract, is bound by it, and can not nullify or impair it. But this does not divest the government of those great conservative powers which belong to the social condition. Corporations, like individuals, are subject to the general laws for the advancement and welfare of society. Certain acts are prohibited to individuals, while others are enjoined as duties; and so in regard to the artificial existence created by the State. So far as its acts affect individuals or the community, they become a matter for public regulation. The safety of passengers on our railroad cars requires stringent rules, and a strict accountability of delinquent agents.

These are admitted powers of the government, which are in daily exercise, but it is contended that the corporate powers of a Company can not be increased without impairing, to some extent, the rights of the stockholders.

The government has no power materially, to diminish or increase, the corporate powers of a private company against its consent. This is not disputed; but the argument is, that the legislature has no power to give the right to a majority of the stockholders, materially to change the investment. This embodies the objection in its strongest form.

It must be observed that this is not a question of policy, but of power. In this view it is limited to the fact, whether the exercise of the power by the Legislature, necessarily impairs the obligation of any contract which exists, between the company and any of its stockholders. It is alleged that each stockholder has a right to claim his dividend on the stock he subscribed and paid, as provided in the charter, and that the contract is impaired, when a different application is made of the dividend.

Now, it must be admitted, if the stockholder at the time the dividend is applied, or at any prior time, assents to the same, there can be no objection to the power. Assent gives the power. Concentrated capital is essential to the attainment of the great purposes of society. And this can only be secured through organized associations, to establish commercial facilities, too great for individual enterprise. And every individual who vests his funds in such an enterprise, yields his private judgment to the general direction, under the terms of the charter. And to this may be added, any further aid of the Legislature, with the consent of the stockholders to extend the enterprise, so as to enlarge its benefits to the stockholders and the public. This

system, not free from abuse, has been the legalized course of action in our Western Railroad extensions. A more rigid, would have been a wiser and a better course.

Charter extensions is a common exercise of legislative power, and the difference between the acceptance of an original and an amended charter, has not become marked. Indeed, general laws have been passed, as in the act before us and also in the act of 1st May, 1852, to promote what was deemed a sound, and, certainly, a popular policy.

Under such circumstances, all that seems to remain open for scrutiny is the particular transactions involved. Were the powers exercised by the defendant authorized, under its original or amended charter, or under the general act of 3d March, 1851, and were the same powers within the charter of the "Columbus, Piqua & Indiana Railroad Company." The fourth section of the act of March 3, 1851, is relied on as the authority of the Piqua Company; and as a general law, it may as well apply to that Company as to the defendant.

The indorsement complained of was by the defendant jointly and severally, with the Bellefontaine and Indiana Company, and the Indiana and Bellefontaine Railroad Company, for \$400,000 of the third mortgage bonds of the Columbus, Piqua and Indiana Railroad Company, bearing date, 1st April, 1854.

These bonds are alleged to be void, mainly, upon the ground that William Dennison, Jun., a stockholder in the Columbus, Piqua and Indiana Railroad Company, purchased, in connection with his father-in-law, William Neil, six hundred thousand dollars in bonds, under the third mortgage of the Company, four hundred thousand which were indorsed by the defendant.

The act of December 5, 1852, the charter of the Piqua Company, declares the bonds or stock, "if purchased for less than the par value by a Director, shall be null and void." Before the purchase, Dennison resigned his office of Director, though the law declared he should continue in office until his successor was elected and qualified. There is no evidence that Mr. Dennison, after his resignation, acted as Director; and if there were, it is not perceived how such a fact could be material to affect the rights of the bondholders in this case. It is true a consideration is necessary to support a guaranty, but a want of this could not be shown to destroy the right of a bondholder, who purchased without notice and in good faith.

For the six hundred thousand dollar bonds, Neil and Dennison agreed to pay three hundred and five thousand dollars.

As a part of this purchase, full power of adjusting controversies between the Piqua Road and the Indiana, Piqua and Bellefontaine Railroad Company, was given to Neil and Dennison, and also permanently to establish the gauge of those roads.

And afterwards, on the 7th of March, 1854, an agreement was made between the Cincinnati, Cleveland and Columbus Railroad Company, the Indiana and Bellefontaine Railroad Company, and the President and Directors of the Bellefontaine and Indiana Railroad Company, of one part, and Neil and Dennison of the other part, in which Neil and Dennison agreed that the Piqua gauge should be four feet ten inches, and that the Indianapolis Railroad should be of the same gauge. In consideration of which, a certain amount of stock of the Piqua Road, the parties of the first part agree to purchase, and, among other things, agreed to endorse four hundred of the third mortgage bonds of the Columbus, Piqua and Indiana Railroad Company, of one thousand dollars each, and payable with interest semi-annually, at the rate of seven per cent., at the Banking House of the Ohio Life Insurance and Trust Company, in the city of New York.

These are the arrangements which led to the indorsement or guarantee of the Bonds in question. The change of the Piqua gauge, so as to conform to the gauges of the other roads, connected with that one, so as to run on all of them the same cars, seems to have been the principal consideration for the responsibility assumed in the guarantee.

We now approach an important fact in the case, which is the indorsements of the bonds. The following is the form adopted. "The Cleveland, Columbus and Cincinnati Railroad Company, for value received, hereby warrant and guarantee the punctual payment of the interest and principal of this obligation."

In testimony whereof, the said Company, in pursuance of a resolution of the Board, passed the 6th day of March, 1854, have caused these presents to be signed by its President, this 7th day of April, 1854.

The Cleveland, Columbus and Cincinnati Railroad Company, by H. B. Payne, President.

This indorsement was made on the authority of the Directors only. There had been no meeting of the stockholders on the subject. To supply this defect, the following notice was published in two of the daily papers of Cleveland, in the New York Daily Times, in a paper at Columbus, and also one at Delaware:

OFFICE CLEVELAND, COLUMBUS AND CINCINNATI R. R. CO., Cleveland, June 17, 1854.

A meeting of the Stockholders of this Company, for the transaction of business, will be held at the office of the Company, in Cleveland, on the first day of July next, at 10 A. M. By order of the Board.

M. J. WILLIAMSON, Secretary.

The meeting of the stockholders took place agreeably to the notice, but not more than eight thousand shares were represented, which constituted about one-fifth of the stock of the road. In addition to the stock so represented, there was an amount of above ten thousand dollars represented by proxy, at said meeting, but such proxy declined voting on the question of ratification as his principals had no information of such action.

The objections to this whole procedure are numerous, and some of them forcible.

It is insisted that the guarantee of the bonds in question, is neither technically nor substantially within the fourth section of Act of 1851. That it is not a subscription to the capital of the Piqua Company in the ordinary mode, may be admitted. But the power given is to subscribe to the capital of any other company, or "otherwise" aid such company in the construction of its railroad, to form a connection with the road furnishing the means. The term "otherwise" means "in a different manner," or, "in another way." This is wide enough to embrace any other practical method, than the one expressed.

The connection formed between the Piqua Road and the Cleveland Road is represented to be injurious rather than beneficial, as the passengers on the Piqua Road will be more likely to take the direct central route through Ohio, than the Cleveland road. But this is not a matter for the Court to determine.

The proviso declares no aid shall be given, etc., until a meeting of the stockholders shall be called, but the guarantee was entered into some weeks before the meeting of the stockholders. This is only a matter as to the order of time, and is not material. A subsequent ratification is equal to a prior authority given.

The call for the meeting of the stockholders, seems to be defective in two particulars. It is admitted that a large portion of the stockholders reside in Europe; to their fourteen days notice was sufficient. These stockholders may have agents in this country, but the notice should have been given so as to enable them to consult with their principals. To the domestic stockholders the notice was shorter than a due consideration of their interests required. Where no time is fixed by law for the notice, the Court must say whether it be reasonable.

But there was another defect in the notice. It should have specially stated, I am inclined to think, the objects of the meeting, so that the stockholders or their agents, might have the knowledge necessary for action.

Neither the time nor the manner of the notice, it seems to me, was reasonable. This notice can not be treated as merely formal. Neither the law nor the interests of the stockholders will admit of such a construction.

But the great defect in the procedure was that the stockholders were not represented. Had they appeared without notice, or on the defective notice given, their ratification would have made valid the contract; but as they did not appear or act, with the exception of about eight thousand shares, and are to be charged on the supposition that they had been duly notified, common justice requires that ample notice should have been given. And not only so, but the proviso requires that "the holders of at least two-thirds of the stock of such Company represented at such meeting, in person or by proxy, and voting thereat, shall have assented thereto." Less than one-fifth of the capital stock of the Company, which amounted to a sum exceeding four millions of dollars, was represented at the meeting. The ten thousand dollars represented by proxy was not voted, as his principal was uninformed as to the object of the meeting, and he was, consequently, without instruction on the subject. He acted prudently in withholding this vote, as it imposed no responsibility, under the circumstances, on his principal.

To hold that such a ratification bound the stockholders, would disregard the substantial requirements of the fourth section, and the settled rules of construing corporate powers.

This is the legal aspect of the case, as viewed between the two Railroad Companies; and no Court of Chancery could have hesitated to annul or set aside the contract between these parties, if a bill had been filed by one or more of the Cleveland stockholders, for that purpose.

We come now to consider the great question in the case, whether the rights of the holders of the indorsed bonds are affected by the procedure above noticed.

It is admitted that the bonds, and the coupons attached to them, for the payment of interest, are negotiable paper. They are made payable to bearer, and pass on delivery; and we are now to consider the purchasers of these bonds as bona fide purchasers, in the market, unaffected by notice of facts which should have put them upon inquiry.

Upon their face the bonds purport to have been issued by the proper authority; and the guarantee of the Cleveland road is indorsed in due form under the authority of the Company, and signed by its President.

The whole transaction was entered into in good faith, and with the view of increasing the operations of the two roads, and the others connected with them. This arrangement, and the establishment of an equal gauge, constituted the inducement or consideration, for the guaranty of the four hundred bonds, by the Cleveland Road.

Some ten or twelve arrangements, similar in principle to the above, had been entered into by the Cleveland Road, with other roads and companies, and were provided to establish a usage of the Company; which contracts had been published in their annual reports and distributed to the stockholders without objection on their part.

This, undoubtedly, to some extent, showed an acquiescence on the part of the stockholders in the policy pursued; but it can not be received as evidence of the enlargement of the corporate powers of the company. No want of good faith is charged against the Cleveland Company, in the course taken, but a misconstruction of its powers.

One semi-annual payment of interest on the bonds was made by the Cleveland Company, jointly, with the Bellefontaine and Indiana Railroad Company, and the Indianapolis and Bellefontaine Company, who were co-indorsers with the Cleveland Company.

It has been admitted that the contract of guarantee between the Cleveland and Piqua Companies might have been set aside, for the defects stated in the proceedings, of which the parties to the contract had notice, had a bill been filed by the Cleveland stockholders; but it does not follow that the same relief can be given, as against the bona fide bond holders.

The bonds were guaranteed by the Cleveland Co., for the express purpose of enabling the holder to sell them in the market. They were sold on the credit of this guarantee to bona fide purchasers, who had no notice of any irregularity or defect, in the exercise of the power by the Cleveland Company. It acted in good faith in making the indorsement, and has ever since enjoyed the consideration which induced the Company to become responsible. The forms of the law in its judgment were complied with, and the necessary indorsement of the guarantee was made on the bonds. The bonds and coupons were payable to bearer, and passed by delivery. They were purchased for their value in the market, and that value mainly, if not exclusively, rested on the guaranty.

To ensure the sale of these bonds, printed hand-bills were circulated, with the caption of *Guaranteed Bonds of the Columbus, Piqua and Indiana Railroad Company*, stating the capital of each Company which guaranteed them—the Cleveland Company having a capital of four millions; and the consideration which led to this endorsement is also stated, and in the same hand-bill the ratification of the stockholders is stated, as follows:

CLEVELAND, July 1, 1854.

"At a meeting of the stockholders of the Cleveland, Columbus and Cincinnati Railroad Company, held at the office of the Company in Cleveland, this day, pursuant to a call of the Board of Directors, dated June 16th, 1854, capital stock to the amount of 18,994 shares being represented, W. B. Hubbard, Esq., of Columbus, was called to the chair, and Mr. J. M. Williamson appointed Secretary."

"On motion, the following resolution was adopted, viz.:

"Resolved, That the indorsement, jointly or severally with the Bellefontaine and Indiana, and the Indianapolis and Bellefontaine Railroad Companies, of \$400,000 of the third mortgage bonds of the Columbus, Piqua & Indiana Railroad Company, by order of the Board, March 6th, 1854, be, and the same is approved, adopted and sanctioned by this meeting as the proper act of this Company."

Attested by W. B. Hubbard, Chairman, W. J. Williamson, Secretary; and this is certified to be a true copy from the minutes of the meeting.

This is a copy from the records of the Company, and which was circulated in the market, it is presumed, to encourage a purchase of the indorsed bonds.

The case of the Mechanics' Bank of New York, vs. the New York and New Haven Railroad Company, did not involve the principles in this case. That case when resolved to its simple elements was a very plain one, and, almost of daily occurrence in our courts of justice. A Banking or other Company, having power to make regulations, as to the transfer of its stock, declares that all such transfers shall be made on the books of the Company. Every purchaser, who takes a power or obligation to transfer the stock, receives only the equitable right of the assignor; and where he has no equity, his assignee can have none. This is the whole case. Neither Schuyler nor Kyle had the semblance of equity, they having forged the certificate of stock, of course, the Mechanics' Bank which purchased the certificate, or took it as a collateral security, with a power of attorney to make the transfer of the stock, relied on the equity of Kyle.

The case was discussed by the bench with great ability and research, but nothing was or could be adduced, in illustration of the principles involved, so simple and so clear as the above statement, which is taken from the learned Judge.

The point ruled in that case, shows that a contract made, not under the charter or by-laws of the corporation, will be enforced on the principles of equity, and it was so held in the case of Cartright vs. The Commercial Bank of Buffalo, 22 Wen. 347.

In the case of Fisher vs. The Morris Canal and Banking Company, 3 Am. Law Reg. 423, it was held that Railroad bonds and coupons payable to bearer, passed to the purchaser for value, free from any equities between the Company and the seller. And in Storey vs. the American Life Insurance and Trust Company, 11 Paige. 635, it was held that a negotiable security of a corporation appearing on its face to have been duly issued, was valid in the hands of a bona fide holder, although in fact issued contrary to law. Also, in the case of DeWolf vs. the State of Illinois, 2 Hill, 159. In Swift vs. Tyson, 16 Peters 1, the Court said: "The holder of a negotiable instrument, who has taken it bona fide, for a valuable consideration in the ordinary course of business, when it was not overdue, and without notice of facts which impeach its validity, as between antecedent parties, has a title unaffected by those facts, and may recover on the instrument, although it may be without any legal validity, as between the antecedent parties."

In Putnam et al. vs. Sullivan et al., 14 Mass. 45, it was held: "If one in trust to another, indorsed notes or acceptances, to be used in a certain way, and for the benefit of the principal, and he transfer them to a bona fide holder on his own account, the principal is bound. So a note signed in blank delivered to another to fill up, is good in the hands of a bona fide holder for whatever sum may be named."

Negotiable paper, which passes by indorsement or

delivery, is an important instrument in commerce. Where it bears upon its face evidence of genuineness, and there is nothing to excite suspicion, the person who takes it bona fide in the course of business, can enforce the payment of it, though it be not valid, as between the original parties. If, on such paper, the equities are open as between the persons who created it, its negotiability would be destroyed. And this principle applies, equally to corporations as to individuals.

Within a few years past several hundred millions of dollars in bonds, payable to bearer, have been issued in this country, and sold here and in foreign countries, to bona fide purchasers. If against the holders of these bonds technical objections can be raised, as to the mode of their being issued, when upon their face there was nothing to excite suspicion, but every thing to secure confidence, it would destroy all reliance in such paper.

There is a class of cases where the note is void in its creation, as for usury, or where it has been issued by a bank, in express violation of its charter, it is void in the hands of an assignee. And it has been held that the prohibition in the charter is notice. Root vs. Wallace, 4, McLean, 8, Root vs. Goddard, 3, McLean, 102.

By the complainant it is contended the indorsement was not made for any of the purposes specified, in the acts of incorporation of the Cleveland, Columbus & Cincinnati Railroad Company, or necessarily incident thereto, nor in the course of the legitimate business of the Company, and consequently the holders of the bonds had actual or constructive notice.

It has already been stated that under the 4th section of the act of 1851, the Railroad Company had the power to aid the Piqua Company in the construction of its road, it being connected with the Cleveland road. If this be so, although the aid given was under the special provisions of the above section, and out of its ordinary business, it was no ground from which notice could be inferred.

The condition of the Piqua Road, could not be material, the purchaser of the bonds looked to his security on the face of the bonds, and the guarantees endorsed thereon.

The printed circular shows, it is contended, that the indorsement was made in consideration of the adjustment and settlement of the existing gauge difficulties between the Indianapolis and Bellefontaine, and the Piqua Road, and that the Cleveland Road never had any interest in said bonds, except as guarantors. The arrangement to have the same grade on all the roads was to have a running connection on all the roads, and this was clearly the intention of the parties shown by the contract.

The bonds were payable to Elias Hassett or bearer, they passed by delivery and required no endorsement.

The printed circular referred to as giving notice to purchasers of the bonds, or at least as being sufficient to put them upon inquiry, was calculated, as it would seem to give an assurance of safety in the purchase.

Is the doctrine maintainable, that all who deal with a corporation must look into its charter, not only to be assured that corporate powers have been conferred upon it, but to see that every thing in the exercise of a given power has been done in exact accordance with the mode provided, especially when its acts are set forth in general terms, showing a compliance with the law?

Is every purchaser of a railroad bond, issued to carry out the purposes of the act of incorporation, bound to scrutinize the meetings of the Board, to see that the necessary number of the Directors was present, to issue the bond? If this be necessary, must not the purchaser be also assured that the Directors were duly elected by the stockholders, on proper notice.

A corporation must act within its delegated powers, but its own records and official acts, within the scope of its powers, is evidence against it, and will bind it. Any rule of construction which goes beyond this, is impracticable.

There is another consideration which can not be omitted in this case. On 1st July, 1854, the agent of the complainant had notice of the ratification of the stockholders of the endorsement of the bonds by the Company, but the bill was not filed until the 13th of September, 1856, a lapse of more than two years. During this period the bonds were thrown into the market, and purchased by bona fide holders. While the bonds remained in the possession or under the control of the Piqua Co., when no new equity had arisen, except that which grew out of the contract between the original parties; a court of equity might have interposed, in regard to the powers exercised. But after the bonds have been put into the market and passed into the hands of bona fide purchasers, a new right is acquired, which a Court of Equity cannot reach, unless the purchaser had such notice as to put him upon inquiry. On the ground of a want of diligence, an injunction may be denied.

In the case of Graham vs. the Birkenhead, Lancashire & Cheshire Junction Railway, 6 English Law and Equity, 133, it was held, "though a shareholder in a railway company has an equity to have an injunction to restrain the directors from applying the funds of the company in the completion of a part only of the line, with a view to the abandonment of the remainder, yet, where the shareholders with the knowledge of the intention to abandon the greater part of the line, remained passive for eighteen months, while the directors were expending large sums in the completion of the remainder, the Court refused to interfere by injunction."

Can relief be given in this case, as prayed, under the circumstances stated? There may be differences of opinion on the subject. I know of no authority or principle, on which it can be done. Admit that one of the parties must suffer, which shall it be? Shall it be the bona fide purchasers of the bonds, at their current value in the market, or the Cleveland Company which gave value to those bonds, by its guarantee, and aided to put them into the market to raise money to carry out its railroad connection under its contract.

The injunction is dissolved, and the bill dismissed, at the cost of the complainant.

CLEVELAND, PAINESVILLE & ASHTABULA RAILROAD.

The following is the statement of the earnings, expenses and financial condition of this Company, for the year ending Dec. 31, 1857.

Passenger receipts.....	\$596,177 51
Freights.....	603,053 81
Express receipts.....	23,557 46
Mail receipts.....	24,000 00
Miscellaneous.....	4,744 06

Expenses of operating the road, which includes 1,245 tons new rails, and 700 tons re-rolled, to replace those worn out; about 100,000 new ties; raising nearly all the road-bed with several inches new ballast; lengthening side tracks; substituting permanent stone for wooden cattle-guards; rebuilding two locomotives and a number of passenger and freight cars; a workshop in Geneva; new lumber shed, in place of former one, lost by fire; moving freight-houses for second track, fencing, &c., most of which may be regarded as "extraordinary expenses," not to recur for many years, but necessary to be made to secure the future safety and economy of working the road.....	\$1,251,537 84
	670,083 83

Balance applicable to interest and dividend.....	\$581,454 01
Interest.....	\$63,574 62
Interest January 1, 1858, on Sunbury and Erie bonds.....	17,500 00
6 per cent. dividend, July 1, 1857.....	135,466 13
10 per cent. dividend, Jan. 1, 1858.....	270,932 32

Surplus earnings for 1857.....	\$ 93,980 94
Add surplus Jan. 1, 1857.....	268,403 64

Surplus, Jan. 1, 1858.....	\$362,384 58
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ABSTRACT from the Books of the Cleveland, Painesville and Ashtabula Railroad Company, Jan. 1, 1858.

Assets.—Construction account, including depot, grounds, right of way, machine shop, engine house, car shop, and real estate.....	\$2,603,646 01
Machines and cars.....	620,532 52

(\$52,159 37 expended during the past year in the addition of 2 new locomotive engines, 21 house-stock cars, 24 platform cars, 9 house cars, 1 second class, 2 drovers' caboose cars.)	
New bridges, expended to Jan. 1, 1858.....	463,337 61
(Expended during the past year \$304,455 95 requiring an expenditure of about \$90,000 to complete them.)	

Second track, 13 miles completed and in use, and 24 miles graded ready for the iron.....	224,236 21
(Expended during the past year \$44,353 82.)	

Branch track to Erie harbor.....	43,477 44
Telegraph Line.....	3,415 80
Sunbury and Erie Railroad stock.....	500,000 00
Indianapolis and Bellefontaine stock.....	\$70,000
Less charged to profit and loss in 1857.....	49,000

Cleveland and Pittsburg Railroad Company bonds, received on account protection piling \$2,500, at 80 cents.....	2,000 00
Bills receivable.....	35,171 52

Balance due from C. C. & C. & E. Railroads.....	23,908 36
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Material on hand for repairs of road.....	184,569 10
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Material on hand at car shop.....	26,158 43
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Material on hand at machine shop.....	20,745 16
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Fuel on hand on line of road, paid for.....	34,395 00
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Balance due from agents and other roads.....	20,758 32
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Balance due from Post Office Department.....	8,999 98
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Balance cash in hands of the Treasurer.....	5,691 68
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Balance cash in hands of the Paymaster, being payments on January expenses, 1858.....	4,689 54
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Ten second mortgage bonds of this company, purchased at 92 cents.....	9,200 00
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Total.....	\$4,858,932 58
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LIABILITIES.—Capital stock.....	\$3,000,000 00
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First mortgage bonds.....	564,000 00
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Second mortgage bonds.....	303,000 00
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Special mortgage bonds issued to Sunbury and Erie Railroad Company.....	500,000 00
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Bills payable, balance due on Bath street property and land purchased of James Root, not due.....	44,933 32
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Bills payable, six-month notes given to Messrs. Cooper, Hewitt & Co., in payment of iron, due in April and May next.....	74,878 74
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Franklin Canal stock outstanding to be redeemed.....	1,943 75
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Dividends unpaid.....	2,216 12
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Balance due to individuals and other roads.....	5,576 67
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Surplus earnings.....	362,384 58
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Total.....	\$4,858,932 58
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THE SOUTHERN PACIFIC ROAD.

It is less than a year since the seat of this great enterprise was transferred to New Orleans, and the books were opened for new subscriptions here. The company was surrounded with difficulties, and met, unexpectedly, with many more in the prosecution of their labors. They have the greatest reason to be grateful with the results of their eleven months work. By reference to the report of December last, the promises held out to the stockholders will be

seen, and their verification up to the day, fully tested. Provision was to be made to free the company from its floating debt—the charter was to be secured—and the land grant of 256,000 acres perfected. These have been done. The rights of the company are irrevocably vested—the debt is in a way to be fully provided for, and the lands have been carefully selected and surveyed, and are represented to be of great value.

The adjustments and settlements of the new company have had, too, a very important influence on the character and amount of stock. The amount issued was, by the books, in April of last year, when the subscription was opened here, \$2,474,790. The New Orleans subscription added to that sum, \$322,782. When the measures taken by the company are fully completed, the capital stock will have been actually reduced in amount, by the sum of \$470,063, since April, 1857.

It is not the policy of the company to construct the road by the proceeds of sales of its stock. The amount issued must be a comparatively small one, and the number of proprietors necessarily limited, and, as the whole profits and the great resulting interests will all belong to the proprietary—the shareholders of the stock—it has a great intrinsic value, and must at no distant day, when these things are all rightly understood, reach a high figure in the market. The utmost confidence prevails that a wise administration of the land grants, which are part of the best public domain of Texas, will suffice to pay off the bonds for the construction of the road, for which they afford the most ample security; and to leave a large surplus for distribution among the owners of the stock, which now stands below three millions, and will probably never reach five millions of dollars. That amount is the utmost limit to which the subscriptions will ever go, before the company will have so established the road and its own credits that thenceforward it will proceed with ample means, derived from its own abundant and annually increasing resources. We urge this more particularly for the benefit of those who, being subscribers, accidentally or from mis-information, suffered their stock to be sold, and who have it in their power to repossess the same by the 19th of this month.

[The time has been extended to April 15th.] The last Legislature of Texas increased the price of her public domain about one hundred per cent., a fact which adds greatly to the value of the railroad grants. Higher rates still were attached to her own railroad reservations.

We may add as items of public information, that the arrangement for the adjustment of the floating debt of the company are going on satisfactorily, and that they are actively engaged in providing for the completing of the contract with the Messrs. Grant & Co., for the unfinished portion of their seventy-mile contract. Four thousand tons of iron, to be laid on this track, have been purchased, and are now ready for delivery to the company.

In all this there is everything to encourage the friends of this great enterprise—nothing to dispirit or to leave ground for its enemies to stand on. It has obstacles yet to overcome, but the energy which has brought it into its present strong position, inspired by success, will not fail to go on with confidence, and achieve other successes. It is to be hoped that, at no distant period, the intelligence and patriotism of Texas will blend the interests of the Southern Pacific with those of the Memphis and El Paso road, and thus give a united action in favor of the first grand division of 800 miles of a national road to the Pacific ocean, which will command the contract for carrying the mails, troops and military supplies of the Government of the United States.

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,

AND AT PRIVATE SALE.

BY HEWSON AND HOLMES,

March 24, 1858.

BONDS.

\$10,000 Cov. & Lex. R. R. Co. 7 per cent. 3d Mort. Bonds.....	35 and int.
\$5,000 Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	55 and int.
\$2,000 Cov. & Lex. R. R. Co. 10 per cent. Income Bonds.....	20 "
\$5,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	77 "
\$6,000 Ohio & Miss. R. R. Co. 7 per cent. Construction Bonds.....	30 "
\$1,300 Col. & Xenia R. R. Co. 7 per cent. Div. Bonds. Due in '68.....	85 "
\$3,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	78 "
\$1,000 Hillsboro & Cincinnati R. R. Co. 7 per cent. 1st Mort. Bonds.....	25 "
\$2,000 City of Wheeling 6 per cent. Bonds.....	40 "
\$5,000 Town of Perrysburgh, Wood Co., Ohio, 7 per cent. Bonds.....	50 "
\$1,000 Dayton & Western R. R. Co. 7 per cent. 3d Mort. Bonds.....	52 ½
\$862 Little Miami R. R. Co. Dividend Scrip.....	76

STOCKS

200 Shares Ohio & Miss. R. R.....	6
84 " Columbus & Xenia.....	75
60 " Little Miami R. R.....	77 to 78
33 " Indianapolis & Cincinnati.....	46
20 " Clev., Col. & Cincinnati.....	97

MONETARY AND COMMERCIAL.

The past week have exhibited considerable improvement in general business. The river is in fine navigable condition, and produce and merchandize are moving forward. It is estimated by those who have paid attention to this subject, that more than half of last year's crop is still in the hands of the farmers. The country is, therefore, still rich in its last year's labor. The movement of this surplus and the quick returns from its sale will enable the farmer to pay the trader, and the trader to pay the merchant. A good deal of protested paper will be taken up, and debts now overdue be cancelled. The railroads and steamboats will earn more from freight than they have done for some time past.

Exchange has stood about stationary now for some considerable time. Gold about the same. We quote Eastern exchange at 5-8 to ¾ buying, and 7-8 to 1 premium selling. New Orleans par to ½ premium.

In stocks we notice a quiet market, owing most probably to the active employment of money in commercial circles. Prices, however, are sustained.

We notice a movement toward the establishment of a general redemption agency for the banks of Ohio and Indiana. It meets with favor among all the legitimate banking institutions, and we trust that the measure will be adopted.

The late news from Europe indicate an unsettled market. This is owing to political considerations rather than want of confidence in commercial circles.

SALES AT THE NEW YORK STOCK BOARD—March 20.

\$11,000 U. S. 6's, '65.....	103 ½
2,000 Tenn. State 6's, '90.....	88 ½
1,000 Virginia 6's.....	92 ½
1,000 Miss. 6's.....	83
14,000 do.....	82 ½
5,000 Iowa St. 7's '68.....	103 ½
1,000 Erie Bonds '71.....	83
1,000 Harlem 1st Mt. Bonds.....	84
2,000 Mich. C. 8's.....	102
5,000 Ill. F. B.....	86
1,000 Erie R. R. Co. 6's, '62.....	54
60 Shares Milwaukee & Miss.....	30 ½
50 " New York Central.....	91
100 " Erie R. R.....	28 ½
605 " Hud. River R. R.....	28 ½
60 " Pacific Mail St. Co.....	72 ½
100 " Harlem R. R.....	12 ½
31 " Third Avenue R. R.....	96
900 " Reading.....	55 ½
50 " LaCrosse & Milwaukee.....	9 ½
100 " Mich. Cent.....	67
312 " Mich. S. & N. Ind.....	21
375 " Mich. S. & N. Ind. pref.....	45
75 " Panama.....	105 ½
100 " Illinois Central.....	94
50 " Galena & Chicago.....	92
700 " Cleveland & Toledo.....	45 ½
415 " Chicago & Rock Island.....	75

We subjoin our usual quotations from Hewson and Holmes' Stock Circular:

This Market for Railroad and other securities has in the past week been unusually quiet and spiritless: Prices however with one exception have maintained the advance noticed in our last Circular: this inactivity has been caused mainly by the tightness of the money market and the increased demand for money produced by further general improvement in business. The movement of produce from the interior to market is becoming more general, requiring increased monied facilities, and until returns are obtained money can not be abundant or cheap.

The very favorable appearance of the coming wheat crop is producing its effect, and the farmers are now anxious to get their wheat to market.

The Exchange market is without any noticeable change rates have not varied to any quotable extent, we accordingly continue our last quotations of ¾ to ¾ prem. on New York, Boston and Philadelphia. Baltimore ¾ to ¾. New Orleans sight bills have been in more demand at ½ prem.

Our sales of Securities include \$10,000, third Mortgage Bonds of Covington & Lexington R.R. at 35, this sale was made under somewhat peculiar circumstances, and is 5 per cent. lower than some small sales of last week; this class of Bonds are held firmly and above this figure; the sales of 2d mortgages of the Covington & Lexington are at 55 and int. Little Miami Bonds have sold at 77 and int.

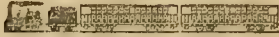
In shares we note sales of Little Miami at 77 to 78., Columbus & Xenia at 75. Indianapolis & Cincinnati at 46 Hamilton and Dayton since the favorable report of the investigating Committee is held firmly at 60, but we are not advised of any sales during the week.

Mercantile business is more active. Merchants from the interior, however, buy very sparingly, but in the main the sales of merchandise and the prospects of business for the spring is as favorable as can reasonably be expected.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
Feb. 1858. VOSE, LIVINGSTON & CO.,
Mar. 25, ft. 9 South William St., N. Y.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-1y

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858,

For the Grubbing, Grading, Masonry, Bridging and Cross Ties, for the FIRST Division of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK,

Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.

March 18—21.

IRON BOILER FLUES
PASCAL IRON WORKS.MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc
Warehouse, 85 South Third St.,
PHILADELPHIA. JUN

RAILROAD IRON.

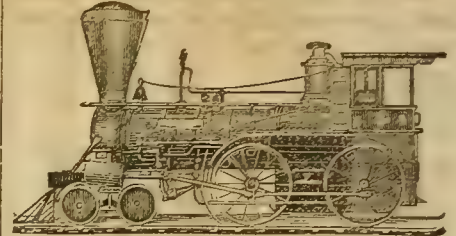
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. H. GOODMAN & CO.,

no. 7 Wall st., N.

Feb. 7, '56-2m.]

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch. ap.20

MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an Iron Forging of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

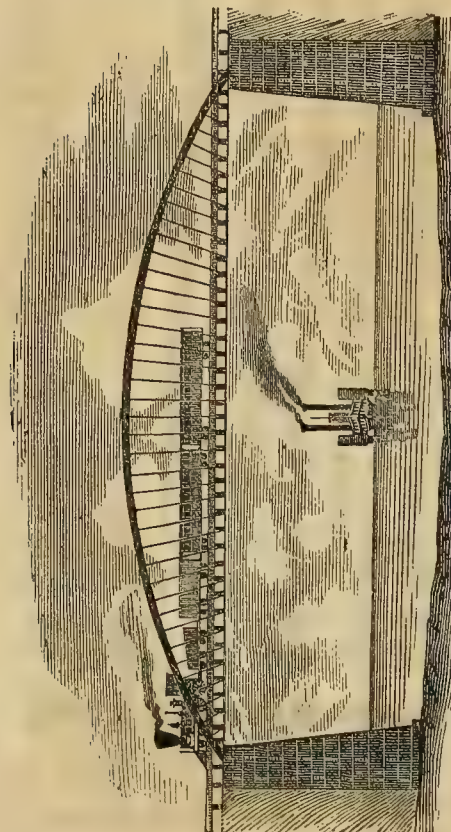
ALBERT BRIDGES.

Of the late firm of Bridges & Bro
JOEL C. LANE

feb4tr

MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.



These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floors, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 50 feet span, 8,000 lbs. weight, \$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2600 lbs. weight, \$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 32 squares, \$1300, or \$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES,

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc.; and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

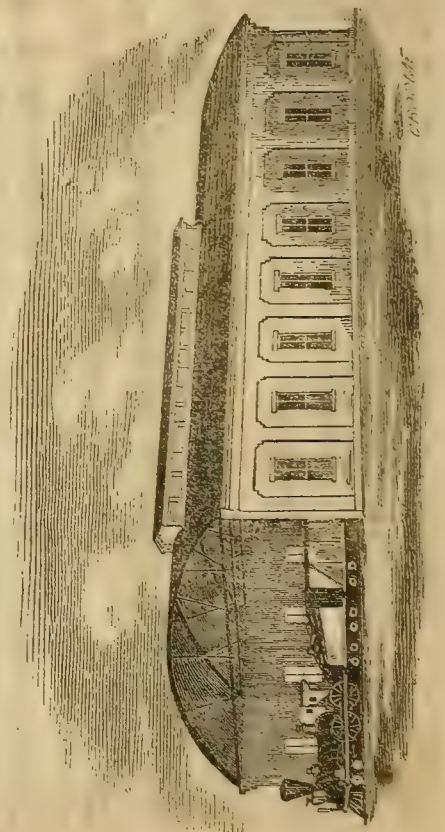
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 92 Broadway, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 18, 1858.—6m.



Most Direct Route to the East.

BALTIMORE AND OHIO
RAILROAD.From Wheeling to Baltimore and
Washington City, D. C.MAKING DIRECT AND CERTAIN CONNECTIONS WITH
PHILADELPHIA AND NEW YORK,
BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting
lines) now offers the fullest advantages to travelers be-
tween all parts of the West and the larger Eastern
cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASH-
INGTON CITY, BALTIMORE, PHILADELPHIA and
NEW YORK, thus giving the Western merchant the
range of the Baltimore, Philadelphia and New York
markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars
of the Little Miami Railroad Express Train, at 6 A. M.,
10 A. M., or 6 P. M., for Columbus, connecting there
with the Central Ohio Railroad through Newark and
Zanesville, for Bel Air, on the Ohio, four miles from
Wheeling. From this place the connection with the
Baltimore and Ohio Railroad is made direct. By the
Express Train of this route, the time from Cincinnati
to Baltimore is but 26½ hours, and to Washington is but
27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2
Burnet House, second door west of Vine street; No. 177,
Gibson House Building, and old office, southeast corner
of Broadway and Front street, opposite the Spencer
House; or at the Eastern (Little Miami) Depot, East
Front street.P. W. STRADER,
General Agent.Be sure to ask for tickets by the Wheeling route and
Baltimore and Ohio Railroad.Baggage checked through from Cincinnati to Bal-
timore.FREIGHTS.—With the largest equipment of any rail-
road in the United States, the road is prepared to do an
immense business in the transportation of freights,
which are carried with care and dispatch, and at rates
as low as those of any other first class line. For particu-
lars see freight tariff, copies of which may be seen at
any of the forwarding houses in the West.

WM S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,
Office, Adams Express Co., Third street.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANS-
VILLE & CRAWFORDSVILLE, and the TERRE
HAUTE & ALTON RAILROADS.Trains leave Union Station, at Indianapolis, daily,
Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival
of the trains from Cincinnati.) Arrive at Terre Haute
at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the
Evansville & Crawfordsville Railroad, for Vincennes,
Evansville, Cairo, and St. Louis. Or by the Terre
Haute & Alton Railroad, at 3:40 P. M., for St. Louis,
Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples,
La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre
Haute at 11:52 P. M.; making connections with the 12:30
A. M. trains of the Evansville & Crawfordsville and the
Terre Haute & Alton Railroads, for the West and
South, as above.E. J. PECK,
Supt Terre Haute & Richmond R. R.

PAGES'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the
above Mill, in connection with their improved
Ratchet Double Setting Head Blocks.They also keep on hand a full and complete assort-
ment of Cast Steel Saws of their own manufacture, Saw
Mandrels, Shingle Machines, &c.Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

1857. November 30. 1857.

LITTLE MIAMI
AND COLUMBUS AND XENIARAILROAD.
EXCLUSIVELY AN EASTERN ROUTE.
THROUGH TICKETS VIA.WHEELING,
STUEBENVILLE,
PITTSBURGH,
CLEVELAND,
DUNKIRK,
BUFFALO,
NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus
and Cleveland, without change of cars. 9:40 A. M.
Express, through to Belair without change of cars.

FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville,
and Wheeling Lightning Express, leaves Cincinnati at 6
A. M., for all the Eastern cities; also Springfield.This train stops between Cincinnati and Columbus
at Loveland, Morrow, Xenia and London only.SECOND TRAIN.—Cleveland Express Mail, leaves
Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New
York, Boston, &c., Wheeling, Baltimore, Philadelphia,
Washington City.This train stops at all points between Cincinnati and
Columbus.THIRD TRAIN.—Columbus accommodation, leaves
Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P.
M., and connects with trains for Steubenville, Pitts-
burgh, Wheeling, Washington City, Baltimore, Philadel-
phia, New York, &c.; also, Springfield.This train stops at all points between Cincinnati and
Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than
Cincinnati time.

FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at
Union Office, No. 2 Burnet House, or at the Union Office
south-east corner Broadway and Front street, opposite
the Spencer House; or at the Eastern Depot.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent.

THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each
and every train. By leaving directions at either of the
above offices, they will call for passengers in all parts
of the city, without fail.

no12

H. B. RUGGLES, Conductor.

TO LOUISVILLE
IN SIX HOURS.Change of time for Indianapolis, Chicago, and all
the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FU-
rther notice, the Trains will depart from Mill street
station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45
P. M.FREIGHT.—For Louisville, Indianapolis, Peru, Chicago,
Terre Haute, Vincennes, Evansville, and all interme-
diate stations, at 5:30 P. M.For further information in regard to Freight, apply
at the Station on West Front, near foot of Columbia
Street.FOR TICKETS apply at offices, No. 2 Burnet House;
Station on West Front Street, or to the offices of the
Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and
call on orders left at the Ticket Offices.Omni-buses for 5:45 P. M. train will leave Gibson
House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omnibus L.

Office No. 2 Burnet House.

'an2

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machi-
nery, &c., large Cuts for Show Cards, Posters, &c.
executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,

jan8 1y 119 Walnut st., Odd Fellows' Buildin

1857. Summer Arrangement. 1857

Cincinnati, Hamilton & Dayton
[TRUNK LINE.]

RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore
Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS,
PHILADELPHIA, TERRE HAUTE,
CLEVELAND, ST. LOUIS,
DUNKIRK, LAFAYETTE,
BUFFALO, LOGANSPOET,
NIAGARA FALLS, CHICAGO,
NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M.
(Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45
P. M., and 6 P. M.LIGHTNING EXPRESS leaves at 6 A. M., for Cleve-
land, Buffalo, New York, Boston, Pittsburgh, Philadel-
phia, and all Eastern Cities, arriving at Cleveland at
4:32 P. M., in time for FIRST FAST EXPRESS TRAIN
on Lake Shore Road, reaching New York at 2 P. M.
next day. Passengers are allowed 40 minutes at Cleyd
for dinner. Also connects at Cleveland with steamer
Queen of the West and Crescent City for Buffalo.Connects at Bellefontaine direct for Pittsburgh and
Philadelphia, reaching Pittsburgh at 7:30 P. M.Connects at Forest for Fort Wayne and Chicago, ar-
riving at Chicago at 10 P. M. same day, WITH ONLY
ONE CHANGE OF CARS FROM CINCINNATI TO
CHICAGO.Connects at Dayton for Springfield, Sandusky, Toledo,
Detroit, Troy, Piqua, Sidney, and all points North, East
and West.INDIANAPOLIS AND LOGANSPOET EXPRESS
leaves at 6 A. M. for Richmond, Indianapolis, Terre
Haute, St. Louis, Lafayette, and all Western cities.Also, for Anderson, Kokomo, Logansport, and all
points on the Wabash Valley Road.HAMILTON ACCOMMODATION leaves at 7:30 A.
M. Stops at all regular and flag stations.MAIL EXPRESS leaves at 9 A. M.; reaches Cleve-
land at 9:10 P. M., in time for Night Express on Lake
Shore Road (and supper). Also connects at Forest go-
ing East. This train makes direct connection at San-
dusky at 6 P. M., for Toledo and Chicago. Also con-
nects at Sandusky with

"STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cin-
cinnati—being 10 hours shorter than by any other route.Also connects at Dayton with Greenville & Miami
Road for Union and all points on the Bellefontaine
Road, and with Mad River Road for Springfield and all
points on that road.INDIANAPOLIS EXPRESS leaves at 2:15 P. M.;
makes connections at Indianapolis for all points North
and West.DAYTON EXPRESS leaves at 3:45 P. M.; connects
at Dayton with train for Troy, Piqua and Sidney. Also
with train on Mad River Road for Springfield and Belle
fontaine.NIGHT EXPRESS leaves at 6 P. M.; connects a
Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia
arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M.,
in time to connect with MORNING EXPRESS Train
on Lake Shore Road. This train also connects at For-
est with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for
Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P.
M.FARE TO ALL POINTS AS LOW AS BY ANY
OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

RETURNING TRAINS

Leave Dayton at 5 and 8:45 A. M., and 1:30 and 5:3
P. M.Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:5
6:55 and 10:15 P. M.For further information and Tickets, apply to the
Ticket Offices, Northeast corner of Front and Broad-
way, No. 169 Walnut street, near Fourth, or at the
Southeast corner of Fourth and Vine streets, or at the
Sixth street depot.

D. McLAREN, Superintendent

The Omnibuses will call for passengers by leaving
their names at either of the Ticket Offices.

W. H. SMITH Agent

WAREHOUSE

No. 5 FRONT STREET

Opposite Public Landing,
Cincinnati, O.**PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD SPIKES, MADE OF "POMEROY IRON."**

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.**POOLE & HUNT,**

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,

STATIONERS, BOOKSELLERS,

-AND-

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

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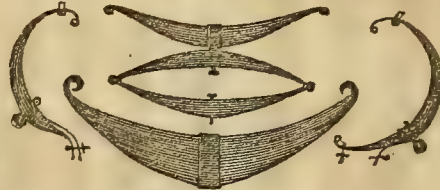
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CINCINNATI:

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Railroad Record

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SONORA EXPLORING AND MINING COMPANY OF CINCINNATI.

The following are the officers of this company for the ensuing year:

Directors:—S. P. Heintzelman; E. Conkling; C. D. Poston; T. Wrightson; S. Colt; E. C. Middleton; S. Flickinger.

The late advices of the company show the smelting and amalgamating works to be nearly completed. They are expected to be in operation by the middle of May, and will run out some \$2700 in silver per day. We understand that the Company are about to send an additional force to the mines to assist in the development.

THE TRANSIT LINES OF OHIO—LOCOMOTION IN ITS PRACTICAL EFFECTS.

Ohio is the State, of all in the Union, which, in a given space of time, has done the most for commercial facilities by transit lines, and which, probably, illustrates but their effect in growth and wealth. In the Report of the Commissioner of Statistics to the General Assembly, we have the facts—of which we avail ourselves—to give a view of locomotion in Ohio. We will begin with Railroads, as they are more particularly the topic of our discussions. In the year 1832, the Legislature chartered a great number of railroad companies; but, little was done, till a part of the Little Miami Railroad was constructed in 1843. Nor was much activity manifested in railroad construction till 1850. Since then most of our roads have been made. The present result is as follows:

Railroads completed.....	2,834 miles.
Cost.....	\$95,000,000
Debt, funded and unfunded.....	\$55,000,000

Ohio has about one-eight part of the miles of completed railroad in the United States. It will be seen from the above statement, that the cost has been an average of \$34,000 per mile; and that nearly \$20,000 per mile exists in the form of debt. In this particular, however, there are great differences. The important and profitable line from Cincinnati to Cleveland—owes comparatively a very small debt. With a cost of eleven millions of dollars, the debt is only a million and a half. On the other hand, the Central Ohio and Marietta Road, have very heavy debts.

The *machinery* of these roads and the consumption of fuel is a very interesting part of railroad operations. The Report on Statistics estimates these at 600 locomotives, consuming 600,000 cords of wood. At the average price of wood in Ohio, this fuel costs the companies \$1,200,000. *Twelve thousand acres of wood land* has to be denuded to procure this fuel, and as it must be supplied from within three miles of the road to furnish it at present prices, and as more than half that space is already cleared, it is quite evident that it can not be long before the supply of wood will be exhausted. It is manifest that railroads must soon rely on *coal*, and the sooner they begin the better.

Canals were commenced in 1825, but as they are now inferior to Railroads, we have placed them second. The Canals of Ohio are as follows, viz:

Ohio Canal and Branches.....	340 miles.
Miami Canal and Branches.....	227 “
Hocking Canal.....	56 “
Muskingum Navigation.....	91 “
Walhonding Canal.....	31 “
Sandy and Beaver Canal.....	86 “
Wabash and Erie Canal.....	18 “
Aggregate.....	849 “

The Canal Commissioners report about 1,700,000 tons carried over their works; but, the amount is diminishing so rapidly, that the State authorities are becoming anxious to sell the Public Works. In time, their

whole business must become absorbed by the railroads. An act to sell the Canals will probably pass the Legislature.

3. *The Turnpike and Plank Roads* are reported at 2,400 miles. In 1835, '6 and '7 a popular fever existed for Macadamized roads, and at that time many were made. Most of them were made in the Miami country. Since then some Plank roads have been made in the northern part of the State; but, little zeal has been excited for this species of improvement. For the last eight years public opinion has run altogether in favor of railroads.

4. *Common Roads.* By the laws of Ohio, the great body of common roads are laid out as county or township roads, which, being legally enacted, are then worked or improved by the people, according to their wants. In this way, most of the roads in common use have been made, and they are, for farmers, the most useful roads in the country. These roads are short, but very numerous.

The results are as follows:

Number of Common Roads.....	18,783
Total length.....	66,200
Average length.....	3½ miles.
Average Number of Roads to a County.....	213

The State of Ohio contains more than forty thousand square miles of surface, and consequently, there is more than a mile and a half of Common road established by law to each square mile of surface. Scarcely any farm is more than one mile from a public road, and these county roads all lead to some station or depots on a railroad or canal; thus affording the utmost facilities for the transportation of products to the great markets. The aggregate of transit lines in Ohio is as follows, viz:

Coast of Lake and River.....	630 miles.
Canals.....	849 “
Railroads.....	2,834 “
Turnpikes and Plank Roads.....	2,960 “
Common Roads.....	66,200 “
Aggregate.....	73,413 “

There are, then, *seventy-three thousand miles of artificial lines of transit*, or nearly two miles to every square mile of surface. These lines occupy about one hundredth part of the surface of the state, and have cost *one hundred and fifty millions of dollars*. “When we consider that this cost for lines of transit alone is double the entire value of the State half a century ago, that, in fact, it is almost entirely the work of a single generation, that since the first railroad was made in 1846, the entire property of the State has doubled in value, it must be admitted that the people of Ohio have, in these works, achieved a most magnificent as well as successful enterprise.” Since 1825, when the first canal of Ohio was commenced, the property of Ohio has more than quadrupled in value. Fertile as is her soil, and great her resources, she could not have accumulated half her present wealth, without the vast system of internal improvements which has so developed all her natural elements and increased her population and industry.

In the State of Ohio, it will be observed that there are 24 miles of road to one mile of railroad. These 24 miles are *feeders* to that mile of railroad, and it would be a curious problem to ascertain how near the aggregate products carried on any given railroad corresponded with the surplus products thus drained. In our opinion, they would correspond very nearly with each other, when there was no very near competing road. For example, the great line of road from Cincinnati to Cleveland drains a surface of about 6,000 square miles. We venture to say, that if the agricultural freight on that road were taken in the aggregate, and the surplus products of that surface ascertained, they would very nearly correspond. It is, therefore, of great importance to railroads, not merely to secure their own interests, but to encourage all reasonable facilities of transportation by roads intersecting the railroad lines. The want of these will lead not merely to retard improvement, but to carry business, when it is possible, into other channels.

STEAM CONDENSER—PROSSER'S PATENT.

One of the greatest difficulties in the way of the successful use of low pressure steam engines has heretofore been the difficulty of condensing the steam on its escape from the cylinder. The result has been a resistance to the piston in proportion to the defective condensation and consequent loss of power. To remedy this difficulty, Mr. Thomas Prosser, of New York, a civil engineer of considerable ability, has invented and patented what he terms a surface condenser, which is very simple in its application, occupies little room, is quite effective, and supplies the boiler with pure distilled water. As an improvement in steam machinery, Mr. Prosser's method is a great advance on the present system. The great feature of the apparatus is the use of annular cylindrical spaces both for the generation of steam and its condensation. The heat of the fuel in the boiler is exhausted by passing the products of combustion through annular tubes, if we may use the expression. In this manner he obtains the greatest efficiency of surface action with least possible amount of water and fuel. The steam, after being used, is carried into the condenser, where it passes in like manner through annular tubes and is fully condensed.

Mr. Prosser claims for his invention that it saves from 15 to 30 per cent. of the fuel, and performs from 15 to 30 per cent. more work than the ordinary boiler and engine. Its economy of room and weight must render it a valuable improvement for the use of river and ocean steamers as well as for stationary purposes.

CHICAGO AND ROCK ISLAND RAILROAD.—The earnings of the Chicago and Rock Island Railroad Company for February, 1857, were.....\$64,229 41
February, 1858.....60,686 43

Decrease.....\$3,542 96

MILWAUKEE AND BELOIT RAILROAD.

At the meeting of the stockholders of the Milwaukee and Beloit Railroad Company at Milwaukee, the following Directors were elected:

Sewall Andrews, Esq., Muckwanago.
Edward Elderkin, " Elkhorn.
Geo. D. Dousman, " Milwaukee.
L. E. Downie, " Delavan.
M. B. Medbery, " Milwaukee.
Timothy Mower, " East Troy.
Wm. Mullens, " Milwaukee.
Horatio Hill, " "
Wm. J. Whaling, " "

The Board of Directors re-elected the officers of last year, and are as follows:

Horatio Hill, *President*; T. Mower, *Vice-President*; J. C. Williams, *Chief Engineer*; Samuel Farrar, *Secretary*.

A Committee of three was elected to examine the accounts of the Company hereafter, and report to the stockholders at their annual meeting or oftener if they deem it expedient. This Committee is to consist of stockholders outside of the Board of Directors, and to be chosen by the stockholders at their annual election. This Committee for the present year consists of

Lester Sexton, Esq., Milwaukee.
Moses S. Scott, Esq., "
Edward H. Ball, Esq., East Troy.

PENNSYLVANIA RAILROAD.—The February receipts of the Pennsylvania Railroad were.....\$307,474
Ditto in February, 1857.....413,779

Decrease this year.....\$106,305

For the first two months of this year and the two previous years, the earnings of the road have been as follows:

	1858.	1857.	1856.
January.....	\$335,384 12	\$253,880 43	\$298,102 33
February.....	307,473 93	413,779 34	298,442 16

Total.....\$642,858 05 \$667,659 77 \$506,551 49

The Bank of Wheeling has resumed specie payments.

CHICAGO, BURLINGTON AND QUINCY RAILROAD.—The following are the earnings of the Chicago, Burlington and Quincy Railroad Company for February, 1858:

For Freight.....\$44,436 63
For Passengers.....18,228 30
For Mail and Miscellaneous.....1,360 83

January Earnings, corrected.....\$64,105 96

February.....67,281 72

Total in January and February, 1858.....\$131,387 68

Earnings in January and February, 1857.....120,820 78

Gain in 1858.....\$10,566 90

✂ A bill has passed the Iowa House of Representatives, submitting the State and the Free Bank Acts to a vote of the people at a special election to be held on the fourth Monday of June next. It is thought the Senate will concur.

✂ The Joliet and Chicago Railroad, recently finished, has, we understand, been leased to the Chicago, Alton and St. Louis Railroad Co., at a monthly rental of \$10,000. The stock of this Company is \$1,000,000; length of road thirty-five miles. This road was commenced during the panic, and has been built without having occasion to sell any of their bonds. It is the connecting link between St. Louis and Chicago.

Railroads.

GALENA AND CHICAGO UNION RAILROAD.

The Eleventh Annual Report of the Directors of this Company was made to the stockholders on the 23d of January last. The report of the secretary and engineer was also submitted, together with detailed statements of the receipts and expenses of the operating department and statistics of the business done.

The length of the road is 259½ miles. The whole of the second track, between Chicago and Turner (thirty miles), has been completed and brought into use during the season.

The amount expended at the date of the last report, under the head of Construction, was.....\$2,293,294 62
For the preliminary survey for the Cottage Hill and Elgin line.....262 13
For tools and machinery in Car shop.....3,097 52
Machine shop.....44,918 72
Bonus stock.....686,510 00

Making the whole amount chargeable to Construction account at that date.....\$9,031,182 99

During the eight months of the last fiscal year, there has been expended for, and charged to Construction.....\$105,646 26
The discount on the sale of the remainder of the second mortgage bonds, &c.....258,619 54

Making the whole amount charged to the Construction account.....\$9,395,455 19

The stock of the Company consists of 60,238 shares (of which 6,865 1-10 shares were issued as a bonus to the stockholders), at \$100 per share.....\$6,023,600 00
The funded debt of the Company is.....\$52,015 28

First mortgage bonds, interest 7 per cent., payable semi-annually:

Due February 1st, 1862.....\$262,000
" August 1st, 1862.....160,000
" February 1st, 1863.....60,000
" August 1st, 1863.....112,000

Issued as Third Division bonds.....\$600,000
Bonds due August 1st, 1863.....1,400,000

\$2,000,000 00

Second Mortgage Bonds, due May 1, 1875: Interest at 7 per cent., payable semi-annually, with a sinking fund of \$109,000 per annum.....\$2,000,000
Less the amount purchased for sinking fund, and canceled....153,000

1,847,000 00

Making the whole amount of the Funded debt.....\$3,899,015 28

The Bills payable, and miscellaneous debts of the Company, amount to.....\$49,716 56

The cash in the hands of the Treasurer is.....\$82,974 50

Due from other Railroad Companies.....68,002 37

\$150,976 87

From which deduct the amount of the pay rolls for December, and former unpaid wages....28,201 60

122,775 27

Leaves a surplus of cash and cash items of.....\$73,056 71

The gross earnings of the road for the past eight months have been.....\$1,640,806 94

Amount received for interest.....862 39

The surplus on the 1st May, 1857, was.....153,720 29

\$1,795,389 62

The expenses for the same time have been.....\$921,251 62

Interest on bonds.....130,325 44

Dividend of August last, five per cent.,.....301,115 00

\$1,352,692 26

Leaving a surplus of.....\$442,697 36

This account, however, has been charged with the amount of the improvement account.....\$210,227 04

And the cost of \$55,000 of the second Mortgage Bonds, for the sinking fund installment, due Nov. 1.....78,732 50

248,959 54

Leaving a net surplus of.....\$193,737 82

The whole amount of second mortgage bonds purchased and canceled for sinking fund purposes.....	153,000 00
Makes an actual surplus of.....	\$346,737 82
The net earnings for the eight months, unincumbered by any extraordinary expenditures, are as follows:	
Gross earnings of the road.....	\$1,640,866 94
Interest received.....	862 39
	\$1,641,729 33
Less amount charged for operating expenses.....	\$931,251 82
Less eight months interest on funded debt.....	181,954 05
	1,103,205 87
	\$538,463 46
To which should be added (for the reasons hereinafter stated), the actual improvement made in the track since 1st May last.....	\$93,092 50
And in the rolling stock.....	52,067 00
	145,159 50
Showing the net earnings for eight months to have been.....	\$683,622 96

If the track and rolling stock had been maintained only in as good condition as they were on the first of May, the net earning for the eight months would have been equal to eleven per cent. on the capital stock of the Company, and for the year would probably be about equal to thirteen per cent.

The estimated net earnings for January, added to the net cash and cash assets on hand, are not sufficient, in the opinion of the Directors, to warrant them in declaring a dividend in February, as usual.

The expenses charged for operating the road for the past eight months have been 56 1-7 per cent. of the earnings, which is 2½ per cent. greater than the ratio of the preceding year.

A careful examination of the track was made early in the season, and again at the close of the year, in which the condition of every bar of iron on the road was ascertained, and a more general, though very careful, inspection of the condition of the ties, road-bed and structures was also made. These examinations prove that the substitution of new and repaired rails, and new ties in the track had improved it to the extent of \$93,092 50 beyond its condition on the first of May, besides the repairs and new iron and ties which were added to meet the current wear and tear.

The road and all its appurtenances may now be considered in excellent condition, although the whole of the repairs of the injuries done by the freshets of last winter, are not yet completed upon the permanent plans. The new bridge over the Rock river, near Sterling, a structure of six spans of 125 feet each, is nearly finished, and will be entirely so by the first of February, 1858. The new bridge at Cherry Valley, a structure of three spans of 120 feet each, and the De Kalb bridge are well advanced and will be completed by the first of April next. The bridges over the Kishwaukee and Mill creek, and some other small structures, have been completed and brought into use. All of these structures were injured by the freshets of last winter.

It will be seen by the annexed tables, that the aggregate earnings for the eight months are nearly three hundred thousand dollars less than they were in the corresponding months of the preceding year, and that this decrease has occurred since July.

The decrease in the freight earnings is.....	\$141,322 64
And in the passenger earnings.....	179,159 21
	\$320,481 86
There has been an increase in the earnings from the rents, dockage, storage, etc.....	22,042 98
Leaving the decrease.....	\$298,438 88

At the date of the last report there had been a falling off in the receipts at some of the stations on the main line, which was then attributed, in part, to the abstraction of business by other roads in the north of our line. The local freights on this portion of the road for the last season, show a fair increase over those of the same months of the preceding year, which indicates that the limit of the loss from this cause has probably now been reached.

The local freights on the Fulton line for the last eight months are equal to those of the whole preceding year. The reduced amount of through travel, has caused about three-fourths of the falling off in the passenger earnings. The falling off in both freight and passengers, is mainly due to the diminished amount of the through business.

The way freight business now forms two-thirds, and the way passenger business three-fifths of the whole earnings from each of these sources of revenue. The steady increase in the local business, especially upon the Fulton line, in the midst of so general a depression in the business of the whole country, is a gratifying feature in the future prospects of the road.

In the last report it was stated, that the original plans of the work had all been carried out, except certain specified items, estimated to cost \$92,500, including the completion of the second track from Chicago to Turner (Junction). The double track is now in use, the fencing is completed, and five of the eleven freight buildings on the Fulton line have been built. The remaining six freight buildings required on this line, will cost about \$25,000, which, when built, will complete the original plans.

The Secretary's report shows, that there has been charged to Construction, under the head of "Equipment," for locomotives, the sum of \$538,229 97, and for cars \$773,686 78. The present value of the sixty locomotives now on hand, is \$524,500, and of the cars, \$839,483 75, which shows a depreciation of \$13,729 97 in the value of the locomotives, and an appreciation of \$65,796 97 in the cars, making an excess of present value over the whole amount charged to the Construction account for rolling stock, of \$52,067.

An "Improvement Account" has been opened, since the last report, to which has

been charged the cost of the additional locomotives and cars which were purchased, the cost of a large covered freight shed at Chicago, a wharf, boat, and extension of the levee at Fulton, of the additional side tracks that have been laid down, and the cost of raising the grade and paving in Chicago, as well as a few other items of small cost of a similar character, the whole of which has been paid for out of the income.

It is believed that the common practice upon railroads would have warranted the charge of such expenditures to the construction account, but as the original plans of the works were considered as complete (with the exceptions before mentioned), it is regarded as proper to charge all expenditures of this character to income. The object of a separate expense account of this character is, that the stockholders may be apprised, from year to year, of the extent of the improvements which are made on the road and its appendages. This account has been much increased by the heavy cost of so many new engines and cars.

Stockholders frequently desire to compare the cost of one road with another, with which they are familiar. In making such a comparison between this and other roads, it should be remembered that this company has paid for every portion of its road and equipment in cash, and has never resorted to the modern practice of paying stock and bonds to contractors, and thus largely increasing the apparent cost of construction.

For the purpose of comparing the cost of this with other roads, the following statements are made:

From the construction account.....	\$9,395,455 19
should be deducted as follows:	
Depreciation on bonds sold.....	\$644,487 98
Bonus stock.....	686,510 00
	1,330,997 98
	\$8,064,468 21

Which gives the cost per mile (of 259½ miles), of road, \$31,076 81; or, if the number of miles of track is taken, (332½ miles), \$24,272 25, in which is included a cost of equipment of \$5,055 55 per mile of road, or \$3,948 58 per mile of track.

If the large expenditure for land in Chicago (\$600,000), and the unusually heavy equipment is taken out of the above account, it will show a cost of \$23,709 22 per mile of road, or \$18,517 80 per mile of track.

It will be interesting to examine more particularly the question of depreciation of the road and works. This takes place from year to year in the superstructure of the road, in the rolling stock, and in the bridges and buildings. The road bed excavations and embankments become appreciated year by year, by the labor which is necessarily embraced in the current expenditures for cleaning out cuts and ditches and raising embankments and ballasting.

The preceding statements show, that the present value of the rolling stock is more than fifty thousand dollars greater than the amount which has been charged to Construction for that purpose. In this item, therefore, there has also been an appreciation.

The large expenditures which have been made during the year, in replacing the original, temporary and imperfect bridges and culverts, by permanent and improved structures, have been sufficient to cover any possible depreciation under this head; although it will be necessary, during the ensuing year, to make a moderate expenditure for the same purpose to complete these improvements. The buildings have been put in thorough repair during the season, and are now worth almost, if not quite, as much as they cost.

OFFICERS AND DIRECTORS.

John B. Turner, *President*; William H. Brown, *Vice President*; William J. McAlpine, *Assistant Pres. and Chief Engineer*; Philip A. Hall, *Superintendent*; William M. Larrabee, *Secretary*; Henry Tucker, *Treasurer*; George M. Wheeler, *Auditor*.

John B. Turner, Walter L. Newberry, Charles Walker, William H. Brown, Benjamin W. Raymond, George Smith, Hugh T. Dickey, Wm. J. McAlpine, Orrington Lunt, Horatio G. Loomis, Chicago; Thomas D. Robertson, Rockford; D. A. Knowlton, Westfield, N. Y.; Charles S. Hempstead, Galena, *Directors*.

THE OPELOUSAS RAILROAD.

We have received a copy, in pamphlet form, of the Annual Report sent to the Legislature, by the President of the New Orleans and Great Western Railroad Company, in accordance with the law.

The first grand division of the road from New Orleans to Berwick's Bay, is finished, and forms a complete road in itself. From that point a line of steamers has been established to Galveston in Texas; large and commodious wharves were built, and the company is now erecting suitable depots and other houses for the accommodation of the increased travel and traffic. There is an obstruction to the regularity of these communications in the want of water on the Atachafalaya bar, a difficulty which could be removed at a very inconsiderable expense and should have immediate attention.

Upon the completed division of the road, (80 miles in length) the gross earnings of the road show an increase of about 26 per cent. over the year preceding in the passenger trains, and about 46 per cent. in the freight trains. The entire receipts from both were \$284,177, the whole expense of operating the road, including the whole expense of the company and the repairs and machinery of the road, has amounted to about 72½ per cent. of the gross earnings; but the rate must decrease with the progress of the work and the increase of the earnings.

The estimate of the receipts for the current year is \$392,000.

The President's report, estimates the total debt of the company, on the 2d ult., at \$750,-

000, of which over \$300,000 is not due until November and December of the present year, and January and February of next year.

Their means, consisting of arrears of taxes and subscriptions estimated good, \$232,000; State bonds due on these \$58,000; city bonds worth \$325,000; other small items, and the surplus earnings of the road this year (say \$110,000) they estimate at \$775,000. By these collections, the debt of the company might be discharged, and the first mortgage bonds released from their present hypothecation, and made available for the further prosecution of the road.

The road is now to cross Berwick's Bay to the Sabine, 177 miles, of which the further cost will be \$3,000,000. For these funds they rely on first mortgage bonds on the first section, now completed and in profitable use, to the amount of \$2,000,000, and on the proceeds of the land grants made by Congress, from which they compute that these bonds can be redeemed, without touching the road itself.

Copying the statement made to the city authorities, in September last, the report continues.

"We fully expected to commence operations in October, but we are now met with difficulties not anticipated. It will be apparent to you, that it is a matter of the utmost importance to the business of this city, that the Opelousas road should be continued to the Texas line within the shortest practicable time, and that the munificent donation of Congress should be secured. This sum of \$2,000,000 in bonds, the proceeds of which would be required only in moderate amounts, extending over a period of years, could be very easily managed by a concert of action among our banks, insurance companies and capitalists, and the vast benefits of this enterprise be almost immediately realized.

"The means of effecting this object are here pointed out; these are mainly the negotiation of the bonds. We are very anxious to go on, and rapidly; but taught by the experience of similar undertakings, elsewhere, this company will not enter into any engagement or contract until the prompt and full satisfaction of such obligations shall have been made a matter of certainty; but we will make every exertion possible, with the limited means actually at our command, to push forward the work of preparing the road-bed from New Iberia to Opelousas. In the meantime we must be content that the road, so far as constructed is doing a good business, will pay expenses, and probably, a small amount on the outlay.

"We believe the road can be finished to the boundary of Texas for \$3,000,000; that the lands will bring at least that sum; that the bonds, if negotiated, can therefore be punctually paid from the proceeds of the lands, the existing mortgage on the section to the Bay cancelled, and the subscribed stock of the company remain untouched."—*Picayune*.

GALENA AND CHICAGO RAILROAD EARNINGS.—The following are the earnings of the Galena and Chicago Union Railroad Company for the month of February, 1858, compared with those of the same month, 1857:

	1858.	1857.		
Freight.....	\$46,699 94	\$36,801 44	Inc....	\$9,898 50
Passengers.....	21,474 61	27,059 95	Dec....	6,865 34
Mails, &c.....	3,200 00	3,306 21	Dec....	196 21
Total.....	\$71,074 55	\$67,257 60	Inc....	\$3,816 95

FRENCH RAILROADS.

At a meeting of the Institution of Civil Engineers on 12th inst., Mr. Joseph Locke, delivered his inaugural address as President:—The honorable gentleman confined his observations to one portion of professional duties with which circumstances had induced personal experience,—the principals and character of the French railway system;—and this he was encouraged to attempt in consequence of the late president, Mr. Robert Stephenson, having so fully discussed the main features of English railways;—the origin, progress and results of which were in many respects strikingly dissimilar to those of the continent.

"The practical results, in England," said Mr. Locke, "had been immense convenience and advantage to the public who used, and inadequate profit to those who had constructed, the railways;—but in France the terms were reversed; the capital invested yielding a good profit, whilst the service to the public, although far in advance of all former means of conveyance, was still very limited.

"In contrasting the systems, it would be shown that the real difference was greater than was apparent on a mere comparison of percentage of income and profit; and that, other things being equal, the advantage might be assumed to be in favor of England, in all that was essential to the success of improved communication; and all circumstances being considered, the result should have been a higher rate of profit from railways in England than in France.

"The essential characteristics of the French system were, first, the determination by the State of the locality and direction of the main arterial lines of railway; and secondly, the process which the State, whilst adhering to its general rule of absolute control over the selection of lines, had thought proper to employ, in order to obtain the desired progress in their construction.

"The terms of concession had undergone great variation at different periods of the French railway history, but the system had been invariably sustained by the conservative operation of the ruling principal, and it was this which had given to the French system the main advantage over the more liberal course pursued in England. In the former case, the State absolutely determined the lines favoring exclusively main arterial communications, and forbidding competition within special districts; whilst in the latter case the principals of competition had been not only admitted, but encouraged, with ruinous results to the shareholders.

"In the first projection of a line in France, the English system of parliamentary notices, deposit of plans, standing orders, committees, examinations, &c., were entirely dispensed with. The Government took the initiative in everything relating to public works. All railways must originate with or be sanctioned by the State, and when a ministerial decision was pronounced in favor of the "public utility" of any line, the Minister of Public Works was authorized to satisfy himself of the *bona fides* and ability of the several competitors, to select the most eligible offer, and to enter into a preliminary treaty, which, when approved by the Government, and the Chamber, or Senate, was ultimately signed by the Emperor, and became law. The 'cahier des charges,' fixing the conditions of the concession and the powers of the company was settled at the same time. The Government furnished such plans, sections and other data relative to the

line, as were in its possession, and the railway was then laid out. The 'cahier des charges' allowed considerable latitude in the selection of the line. The preliminary survey or 'avant projet,' containing a general description of the line, with details of the curves, gradients, &c., was presented by the company to the Minister of Public Works, who, after consulting with the 'Conseil des Ponts et Chaussées,' signified his approval through the Prefet to the company.

"Meanwhile plans and references were prepared for each 'commune,' or parish, showing how the roads, rivers, &c., were proposed to be crossed, or deviated, which, being sent to the Prefet, were by him communicated to the mayors of the communes. Their receipt was notified on the doors of the church and of the Mairie, and by the beat of drum, and they remain during eight days for inspection by all who were interested. A *process-verbal* was then drawn up of all objections, for submission to the Prefet, by whom a commission was named, composed of members of the Conseil-General of the Department, the mayors of the communes interested, and the engineer of the company. The report from this commission was sent by the Prefet to the Government engineers appointed to report on the nature and fitness of the works, and to superintend the fulfilment of the clauses of the concession. The report of these engineers being then sent with all plans, &c., to the Minister of Public Works, his final decision was obtained. The Prefet then made his *arrete de cessibilite*, declaring transferrable for public utility the parcels of land marked for expropriation. The procureur Imperial of the civil court of each district, then required from the tribunal, orders of expropriation. The civil tribunal examined whether all the formalities had been rigorously fulfilled, decreed the expropriation, and from that moment all the houses, land, &c., became the property of the company, by whom the amount of the indemnity settled by agreement, or by jury, must be paid.

"The time occupied in these preliminaries varied from six to twelve months, but although tedious, the process was not expensive, and it exempted the company from the doubtful and onerous charge to companies in England, of getting a bill through Parliament, at a cost which ever after remained a dead-weight on the company.

"The first railway concession granted in France was in 1823, for a line twelve miles in length, from the coal-fields of St. Etienne to Andrezieux, on the Loire; in 1826, and 1828, other lines from the same district to Roanne and to Lyons, were granted; these were all constructed entirely at the expense of the promoters. In 1838, the lines from Strasburg to Basle; Paris Havre; Paris to Orleans; and Lille to Dunkerque, were conceded to private companies, but the funds not being provided, the concessions partially lapsed. In 1842 a law was passed, authorizing the State to construct the railways up to "formation level," and to let for a term of years the working of the lines to companies, who would provide the permanent way, engines, and rolling stock. This had the effect of giving considerable impulse to the railway system, and induced the importation of foreign capital. The law was subsequently modified by the State granting "subventions" of money, instead of constructing the earthworks, &c. Up to 1842, the concessions granted were under 600 miles, but in that year alone upwards of 1,400 miles were sanctioned. Among

these were—Paris to Lille and Valenciennes; Rouen to Havre; Paris to Strasburg; Paris to Lyons; Avignon to Marseilles; Orleans to Vierzon and Bourges; Orleans to Bordeaux.

"Nearly all the concessions since 1842 had been based on the law of that year, or were in the modified form of giving a "subvention" in lieu of works, with minimum guaranteed interest of four per cent. and an extension of term to 99 years. To this combination of pecuniary aid, with a guarantee of interest, may be ascribed the rapid increase in the development of the French railway system since 1842. It was remarkable that this timely aid, granted by the State, had been thoroughly successful, and in no case had the guarantee for interest ever been claimed; thus the object had been completely fulfilled, without any loss to the State.

"The financial condition of the French railways was exhibited in the following table:—

Periods.	Private Capital.	Contribution of State.	Miles Completed.	Miles Opened.
	£	£		
1823 to 1812	£7,000,000	£150,000	5.0	1,156
1812 to 1847	17,000,000	12,500,000	2,520	2,900
1847 to 1851	8,000,000	9,200,000	5,770	4,000
1851 to 1854	29,200,000	3,840,000	7,030	2,160
1854 to 1857	35,350,000	1,500,000		
Still to complete.	96,700,000	2,440,000		
Total	137,960,000	9,200,000		
Total	173,600,000	35,640,000		

"The total cost, therefore, of the 7,030 miles conceded was estimated at about 24,600*l.* per mile, of which 19,600*l.* was to be provided by the companies, and 5,000*l.* by the State; what the actual cost would ultimately be was not yet ascertainable.

"The fluctuations in the amount granted at different periods by the State, were shown to have arisen from the necessary modifications of the law—the abandoning the rever-sionary interest in the railways—the guaranteeing four per cent. interest, and the remission of the right to a share in the profits after a certain dividend had been paid. The capital guaranteed by the State had, in 1855, reached nearly sixty millions, applicable chiefly to six principal lines, of an aggregate length of 5,200 miles.

"The right of participation, which had originally applied to nearly all the railways founded on the law of 1842, had been generally abandoned; so that it now only applied to five companies, owning 3,500 miles of railway.

"Thus it was shown, that from the commencement, the railways had in some shape always received a certain amount of direct assistance from the State, in addition to the protection afforded whilst exercising a general principal of control.

"The most important element in the fin-

ance of French railways was the proportion which the share capital bore to the amount raised on obligations, or bonds. In this respect the French system differed essentially from that of the English companies.

"In the whole of the capital engaged to be provided by the French companies, amounting, in 1856, to 137,960,000*l.*, there was then 50,000,000*l.* in shares; or only about thirty-seven per cent.; whilst the remaining sixty-three per cent had to be raised on obligations, or bonds. Of this several marked instances were given.

"The effect of this mode of providing the funds was evident on examining the net receipts of the French railways from 1841 to 1854, and the per centage of dividend which had resulted.

The per centage paid on the whole capital expended—in 1841, was 3.11 per cent.; in 1847, 6.30 per cent.; in 1854, 6.58 per cent.

"By the operation of subventions the rate paid to the companies in 1841 was 3.11 per cent.; in 1847, it was 7.17; and in 1854, nine per cent.; thus the State assistance, at the latter period, gave a benefit of 2.42 per cent. on the whole of the remaining capital.

"The largest amount of that capital was, however, raised on loan at a fixed rate of interest, and thus, according as the dividend on the whole capital varied from the interest paid to the bond-holders, a profit or a loss would accrue to the company. In order, then, to a just comparison with English railways, the per centage of net income must, in both cases, be taken on the whole capital raised,—by which the per centage would be considerably reduced on the French side and raised on the English; the rate of interest on loans being taken at five per cent. on both sides. It followed, then, that it depended on the ratio of net profit to the whole capital expended, whether any portion of it, raised by loans at a fixed rate of interest, would increase or lower the rate of dividend on the remaining portion.

"Taking two railways, each having cost a million, one producing a net profit of four per cent., and the other of eight per cent.; if the first had borrowed half its capital at five per cent., the sum left for dividend on the half million in shares was reduced to 15,000*l.*, or three per cent.; whilst the second, by also borrowing half its capital at five per cent., would raise its dividend on its half million in shares to 55,000*l.*, or eleven per cent.

Assuming the same premises, and the limitation of borrowing to be about one-third of the capital, as in England, and in the other case two-thirds, as in France, the operation would be that in the former the share dividend would be reduced to three an a half per cent., and in the latter case it would be raised to fourteen per cent.

"It thus appeared, that the decisive element in both was the ratio of net profit to the whole capital spent in a given undertaking; and that the reason of French dividends being augmented by borrowing so largely, was solely because the rate of profit, earned on the entire cost, was in excess of the current rate of interest; whilst the dividends on English railways were impaired by the same process, because the conditions were reversed.

"It was estimated that the profit realized by French companies, from their system of borrowing so largely, amounted to upwards of three per cent. on the whole of their share capital; and the fact was instanced that, as between 1854 and 1857, the average annual dividends paid by some railways were:—the

Nord fourteen per cent.; L'Est, fourteen per cent.; L'Ouest, ten per cent.; Paris to Lyons, sixteen per cent.; Orleans, sixteen per cent.; Lyons to the Mediterranean in 1855, seventeen per cent.; and in 1857, twenty-three per cent.

The system of gradually extinguishing the capital by "amortissement," spreading it over ninety-nine years at the rate of about one-eighth or one-fourth per cent., was then described. The final result of the comparative examination was, although the true scale of profits on French railways was not quite so high as had been represented, it was still greater than was exhibited by English lines.

A comparison of the expense of construction of the French and English railways exhibited an unfavorable picture of the latter, the estimated cost of the former being about 24,688¢ per mile, whilst that of the latter was about 31,690¢ per mile.

The causes which tended to swell the expenses of English railways had been fully stated by Mr. Robert Stevenson, the late President, in his address from the chair; from many of them, such as the parliamentary proceedings, and the effects of the rivalry of other lines in the respective districts, the French railways were exempted. The physical features of the country, rendering for the most part unnecessary the viaducts, tunnels, and other expensive works, which distinguished the English railways, contributed also much to reduce the cost of construction.

"One fertile source of expense in England had been the duplication of lines and stations in many of the large towns, and the premiums paid by timid directors to projectors of rival lines, in order to buy up and extinguish opposition.

"Of this several glaring instances were given in the cases of the Trent Valley, the Leeds and Bradford, the Oxford and Birmingham, the Birmingham, Wolverhampton, and Dudley, the Richmond, and other railways. If to these causes were added the exactions of landowners, and the enormous expenses of parliamentary inquiries, the dead weight of primary debt on the English lines could be easily accounted for, and from all these the French lines were exempted.

"The cost of railways would probably be diminished in future in England, whilst in France they had not yet reached the culminating point, as between the years 1841 and 1854 the cost had gradually increased from 18,600¢ per mile to 26,664¢ per mile.

"In return for its aid and protection from rivalry, the French Government had secured the gratuitous conveyance of the mails, and had laid on a tax of ten per cent. on passengers, and on first-class goods, which two items yielded five per cent. on the sum of 36,000,000¢ of subventions. Low tariffs were also fixed for soldiers, sailors, prisoners, paupers, &c.—participation, in some cases, after certain division of profits—and the possession, at the end of the concessions, of all the railways in France. After all these considerations, the French system appeared to have reconciled the interests both of the promoters and of the State, as whilst the former had obtained a liberal return for their outlay, the latter had secured substantial public benefits for the aid they had given; in short, the railway interest in France had not, as in England, been made a victim of public exigencies and of private cupidity.

"The limited service for the public on the French lines was then noticed, and it was shown that, as compared with the English sys-

tem, it was deficient. This induced economy, and influenced the profits, but still the cost of fuel, and of all that belonged to the locomotive power, was greater in England.

"Referring to the absolute engineering construction of French railways, there was little to occupy attention, as they were almost entirely imitations of those which had been already completed in England, where the experiments were tried, and where both the engineers and the operatives had to acquire their experience practically.

"Several instances were given by the President of his own personal experience in the construction and maintenance of French railways. He found it, at the beginning, indispensable to secure the co-operation of experienced contractors, and this induced the introduction by Messrs. Brassey and McKenzie of the machinery and skilled labor at their command, in order eventually to instruct others in similar works. The success which attended their efforts, particularly those of Mr. Brassey, not only in France, but in nearly every part of the globe, fully justified the importation of Englishmen to France for the intended purposes.

"One of the most striking consequences was the introduction of the class of "navvies," whose appearance, habits, manners, and mode of work were equally novel to the French; yet they soon became perfectly at home, and inspired such confidence among the native laborers, that they would not undertake any task work unless the gang was headed by a "navvie." The force of the example of these men was now manifest, in the improved style of work on the French lines, so that there was now little, if any difference in the relative values of the labor obtained from each. Thus the introduction of English labor, far from being a grievance, as was assumed, had, as previously in the case of the iron trade and machinery manufacture, considerably improved the condition of the French working class.

"In 1840, there was no important establishment where the locomotives could be made, or even be repaired; this induced Mr. Locke to construct work-shops at Rouen, and in this he engaged the assistance of Mr. Buddicom, who constructed, at fixed prices, all the engines, carriages, wagons, and other rolling stock, required for the Paris and Rouen, and subsequently agreed to repair and maintain them at a fixed rate per kilometre. The experiment was eminently successful, and Mr. Buddicom's operations had been extended to other lines, with great credit to himself and advantage to the railway companies.

"Large manufactories of engines had since been created, equal to the supply of the wants of the country, and English mechanics were now scarcely seen on any other than the Rouen railway. Neither the precision of manufacture nor of manipulation had, however, yet reached the English standard; nor had the economy of working been brought so low, notwithstanding the speed being lower, the wages being less, and the trains less frequent, better filled, and carrying less dead weight.

"In absolute construction there was little to remark. The masonry was more lavish in quantity; the slopes of cuttings were not flat enough, and were frequently pitched with stone; the rails were chiefly the double headed parallel, as first used on the Grand Junction line, in England; the gauge was identical with the English standard, and uniform throughout the country; and the permanent

way generally differed but little from the majority of the British lines.

"One national peculiarity was the employment of females in the booking offices, level, crossings, &c., and other departments, to the duties of which they were found well adapted.

"In the conduct of works, there was a manifest difference between the proceedings of the English and the French engineers; the former personally examined the ground throughout, planned the works, superintended the execution, constantly inspected the progress, determined every proceeding, met every difficulty, and assumed the responsibility of the entire works. The French practice was in many cases the reverse; the engineer devised his scheme in his study, relying upon the reports and surveys supplied by the government departments, or his own subordinates, upon whose information he continued to rely, and to advise rather than to direct, even in cases of exigency. The system commencing with the chief, descended through all grades, each depending in some degree upon the report of his subordinate, so that the chief frequently acted upon information really originating with subalterns possessing very moderate qualifications. There was in this a great appearance of organization,—on paper it was methodical and imposing,—but it could hardly be deemed an efficient substitute for the less formal, but more direct process of individual supervision, by which the engineer was brought into personal relation with the difficulties with which he has to contend and the forces he has to wield.

"Another peculiarity of the continental system was the detrimental influence exercised by the Government engineers of the *Ponts et Chaussées*, as *controlleurs*, whose presence affected the railway system, by their frequent demands, or suggestions, which, although of no legal force, were generally submitted to. The President bore testimony to the consideration with which he had been individually treated in his continental undertakings, but even that could not blind him to the defects of the system.

"In summing up, it was observed, that the difference in estimated cost per mile of the lines hitherto conceded, or made in France, as compared with those in England, might be taken at 5,000¢ to 7,000¢. To this must be added in the French promotor's favor the 5,000¢ per mile furnished by the state. If, however, from the English rate, were taken the outlay solely due to disadvantages from which the French were exempted, the difference in favor of the latter, making every allowance for the more even surface of their country, would be considerably reduced.

"A map of the French railways, showed them nearly all to be in the nature of leading communications; each serving an important district, and itself free from the pressure of competing rivals. The advantage of the French system really consisted more in the class of lines on which the money had been spent, and in the assistance given in raising that money, than in the cost per mile at which the railways had been made. These were the two cardinal points on which the greater prosperity of the system turned; for in reality there were not any special circumstances, excepting giving a more limited amount of accommodation to the public, that would explain its superiority; and that exception was perhaps balanced by the greater cost of working supplies, the higher passenger tax, the ten per cent. rate on a portion of the merchandise

receipts, and the conveyance of the mails, &c., gratis.

"In short, it appeared, that the real source of the present good fortune of the French railways lay in the favorable treatment they received from the State. The French Government certainly did strongly control the railways, but they also liberally fostered that kind of enterprise; whilst the English Legislature, unable to guide, had suffered, if not encouraged, hostile or selfish interests, to encumber and pervert the legitimate objects of the lines. In fact, the contrast between the railways of the two countries was very striking. In France, led and guarded by the sovereign power, method was observable, and success was apparently attained; whilst in England confusion was paramount, and the railway interest, ungoverned and undefended, was left to the chances of competition, abandoned to every species of attack and "black-mail," and was only conscious of authority in the shape of exactions. This view suggested many grave and difficult considerations, some of which fell rather within the province of the philosopher and statesman, than of the civil engineer.

"The President apologized for having dwelt so much at length upon the financial part of the subject; but he contended that the whole question practically resolved itself into a control of the application of capital to a given purpose; which, far from being foreign to the province of the civil engineer, must, on the contrary, be deemed a most important part of it, which should never be lost sight of, from the beginning of his studies to the close of his professional career.

"For the problem proposed to practical science was, not merely the execution of certain works, but rather their arrangement and construction, in a manner calculated to realize the objects in which they originated. The proposition, then, being not simply that railways should be constructed, but that they should be so made as, whilst conferring a public benefit, they should produce, for their proprietors, the benefits in expectation of which funds for their construction had been contributed. The profitable effect of capital directed to a given object, in the hope of profit, was thus a main element of the subject, on which the modern engineer had to exert his skill and judgement. The practical science of the present day, as enlisted in the service of monied enterprise, must necessarily confess itself at fault if by any glaring defect in its exercise, that enterprise did not reap its fair reward. It was obvious, that when the employment of science, by wealth, was mainly actuated by the stimulus of gain, if the inducement ceased, the occupation would be at an end. Public works would no longer be attempted, where experience showed, that instead of profit, ruin must ensue. Confidence would give way to distrust—capital would seek its harvest in other channels, and the cause of past disappointment would become the object of prejudice, which years of subsequent profit would not entirely eradicate.

In every view, then, the successful financial result of the combination of science and capital was the important feature, and the due appreciation of this view really concerned the engineer, no less than the statesman or the capitalist.—*Railway Times*.

ENDORSEMENTS AND COLLECTIONS.

The following is a decision on the subject of endorsements and collections as recently made in the Superior Court of this city:

NOTICE TO INDORSERS—THE LAW OF INDIANA—L. F. Comstock vs. Adams Express Co. A note for \$1,000 was made by the Cincinnati & Chicago Railroad Company, in the city of Cincinnati, payable two years after date to B. H. & G. P. Smith, who had their domicile in Indiana, and who in that State, in Logansport, indorsed the note to the plaintiffs, who reside in Connecticut. Shortly before the note became due, it was handed to Adams Express Company, who, in addition to the carriage of packages from one part of the country to another, undertake to take charge of notes, receive the money, and return the funds; and under this employment it is urged, in the petition, and not denied, that it was their duty to take such steps as was proper to charge the indorsers on the note.

In disposing of the case, Judge Holston remarked that if it was necessary to make a demand and give notice to individuals, the Express Company was guilty of negligence; for it appears instead of making the demand on the day the note became due, it was not made until one month afterwards. But the defense set up in the answer is this: that, according to the circumstances of this case and the law of Indiana, which it is said governs the transaction, no injury resulted to the parties—that no demand or notice was in that State necessary, but merely the bringing of a suit at the first term of the Court where the indorsers resided; and that even that would be unnecessary if the makers of the note were insolvent.

The defense, therefore, involves the inquiry—what was the law of Indiana on the subject? Did the law of Indiana require a demand of payment on the day the note became due, and notice to the indorsers?—the claim being that in respect to a note not payable in bank, a demand on the day it became due was not necessary to charge an indorser in Indiana.

The testimony of an attorney in the case was given, to the effect that the contract of endorsement in Indiana was governed not by the law of the place where the endorsement was made but that of the place where it was payable; and on personal examination the Court felt bound to come to the conclusion that the law on this subject in Indiana is not conformable to the general rule.

The decision in Indiana had never been overruled, though its correctness was questioned, and when called upon to re-examine the question, the Court of that State would probably reverse its former ruling. But on whom should devolve the duty of having the decision reversed? In view of that decision, what was a proper course for the holder of the note, whether he believed it good law or not? It was to have presented the note on the day it became due, and give notice to indorsers so as to bid them; and if for that purpose he transfer it to this Express Co., and they are negligent in attending to the matter, in justice and equity, they should pay the money and are bound to take the risk of overruling the decision of the Supreme Court of Indiana.

Smith & Lowe, for plaintiff; Curwen & Wright for defense.

TRAIN SIGNALING.

BY CHARLES V. WALKER, ESQ., F. R. S.

When, in the early days of telegraphy, messages were sent and trains were signaled on the same wires, no facilities existed for reducing the apparatus employed for the latter purpose to a simple form. The case is now becoming different, special wires being largely devoted to train signals; hence the present system.

The instrument employed is a large electro-magnet, with a movable armature, carrying a stem and a hammer, which latter strikes on a bell by the direct force of magnetism. It is provided with a contact-maker, a spring, the depression which causes a current to circulate. The bobbins are of 4 in. \times 3 in.; and are filled with ten pounds of covered copper wire, No. 16 or No. 18. The core is of five-eighth inch iron. The armature and appendages weigh 2½ ounces. Bells of this kind have been in action for five years without cleaning or repairing. The battery is zinc-graphite, and a solution of 1 sulph. ac. + 8 or 10 water. The plates, 7½ in. \times 3 in., are placed in stone pots that contain about a quart, the zinc standing in a gutta percha slipper containing mercury. Batteries of this kind will do their work untended for half a year and longer.

The language consists of blows on the bell; the number of blows varies according to the train signal to be given. The distinctions required for ordinary purposes being few, the bell-language is very appropriate, from its addressing the ear, from its simplicity, and from the facility with which the signals are given and taken. One blow is for the starting of an ordinary train; two, for an express; three, for the arrival of a train; five, for stopping all trains; six, for testing. This is a general code; other forms of code are used for protecting level crossings and junctions; but the fundamental signals of the general code are of universal application. This system was introduced five years ago on the South Eastern Railway, and at the present time consists of about one hundred bells, to which additions are in progress.

The bells are connected in pairs, both bells being in a circuit that terminates in the earth in the usual way, at each station. The signal is made by depressing the spring from its earth-contact, upon the zinc end of the battery, the graphite end being in permanent connection with the earth. The battery being thus introduced between the bell and the earth, a current circulates along the wire and produces one blow upon the bell. The home bell may be excluded or not from the circuit, when a signal is sent.

By the above arrangement signals are sent from station to station. But the extreme simplicity of the battery, the bell, and the language allows the arrangements to be so modified that signals may be made on a pair of bells from any joint, intermediate between two bell stations, without the necessity of providing the signaler with any telegraph or battery, or any electrical apparatus whatever. The addition of this property to the bells does not in any way interfere with their being in perfect action and constant use for the ordinary work of train-signaling, and therefore if the guards of trains and the plate-players of the permanent way are provided with a signal for expressing their wants, a great advance is made in telegraphy, and a large element of safety is gained for the traveling public.

It is well known to electricians that, if two equal and opposed currents are presented to the respective ends of a wire, no evidence is manifested of the circulation of electric force; the wire is in a null state, as much so as if no current was presented to it. Taking advantage of this law, in connection with the simple bell-system above described, the circuit is made to contain the two batteries, one at each station, as well as the pair of bells; the same pole, the graphite, for instance, of each battery being connected with the earth.

When the home-station signaler desires to make a signal, he depresses the spring as before; but the connections are such, that by this act he excludes his own battery, from the circuit. The circuit then contains but one battery—namely, that at the pass station; the current of which is now able to circulate from end to end, being no longer counterbalanced by an equal and opposite current; and consequently the bells are sounded. This then is the process for ordinary train-signaling, under this arrangement.

By altering the contact-maker so that it inverts the battery in the circuit, instead of putting it out of circuit, both batteries are made available for each signal; and consequently the power and with it the cost of each may be reduced.

But the null state of the wire is equally

W. H. Osborn has been re-elected President of the Illinois Central Railroad, and Geo. B. McClellan, Vice President.

well and very readily destroyed, by connecting it with the earth at any point intermediate between the two stations; for by this process a complete circuit is made or channel opened for the discharge of both ends of both batteries each independently of the other, except that the attached wire between the earth and the telegraph wire is common to both circuits, and thus the bells at the respective stations are actuated by the batteries of the respective stations. If ten blows with the pause of a minute, and then ten more, is the signal that the engine is disabled; ten blows, and a minute of contact, that an accident has happened: a ringing continued beyond ten, that the permanent way is obstructed, the stations at either side are advised, and can take the measures necessary to meet the case.

These contacts may be made by hooking a wire or rod on to the line wire and making the necessary contacts with the rail; or which is better, by establishing contact-makers, properly secured, at frequent intervals on the telegraph posts.

This system gives to those in charge of disabled trains, a certain means of asking for assistance from any point of the open railway, without any training beyond that of counting ten slowly and correctly. In practice, as between Red-hill and Reigate, no inconvenience or loss of electricity has been suffered from counterbalancing the two currents.—*Philo. Mag.*

DAMAGES FOR GOODS MIS-SENT.

The following decision has just been rendered in the Superior Court of this city:

LIABILITY OF RAILROAD CO.—Moses Simons vs. the Cincinnati and Indianapolis Railroad Co. An action for a box of goods put on the cars at Indianapolis for Cincinnati, and by mistake sent to Philadelphia. The plaintiff alleged that if the goods had been received he would have realized a profit of 100 per cent. but that not being received within a short time previous to Christmas, being holiday goods, his profit was wholly lost. He claimed judgment for the value of the stock and for the full amount of his loss.

The Court held that he was entitled to recover the value of the goods, and for any trouble or expense he was at in going in search of them; but he could not recover damages growing out of any profits he may have received by vending them in Cincinnati. Where a party seeks to recover special damages by reason of the non-delivery of goods on a particular day, he should show that he had brought the necessity of such delivery to the knowledge of the carrier. Judgment for plaintiff for \$167 50.

IRON MANUFACTURE—AN IMPORTANT EXPERIMENT.

Below we give the results of an important experiment in iron manufacture. It has heretofore been almost universally considered, that a large investment of capital, in the erection of extensive blast furnaces, and their necessary attendants, was indispensable to the successful manufacture of Pig Metal in this country.

The experiment here made would indicate that iron manufacture can be successfully carried on in a much smaller way than has thus far been thought possible. We give the account of the experiments in the language of the gentlemen who first reported them. He says:

Commenced building Furnace on Monday, Jan. 18, 1858.

Finished on Wednesday, Jan. 20th, and fired it for drying same night.

Commenced filling Thursday at midnight. Took nine bushels coal to fill stack, and used

four additional bushels in heating, before we commenced filling with ore and flux.

Filled with charges as follows:

1 charge	10 lbs. ore	10 lbs. flux	and 1 bushel coal.
39 charges	12 lbs. "	6 lbs. "	and 1 " "
7 "	16 lbs. "	7 lbs. "	and 1 " "
8 "	12 lbs. "	7 lbs. "	and 1 " "
11 "	14 lbs. "	7 lbs. "	and 1 " "
16 "	16 lbs. "	7 lbs. "	and 1 " "
52 "	20 lbs. "	9 lbs. "	and 1 " "
15 "	19 lbs. "	7 lbs. "	and 1 " "
32 "	12 lbs. "	7 lbs. "	and 1 " "
41 "	16 lbs. "	7 lbs. "	and 1 " "
4 "	12 lbs. "	6 lbs. "	and 1 " "
39 "	18 lbs. "	7 lbs. "	and 1 " "
10 "	16 lbs. "	7 lbs. "	and 1 " "
20 "	20 lbs. "	7 lbs. "	and 1 " "
17 "	25 lbs. "	8 lbs. "	and 1 " "
13 "	30 lbs. "	9 lbs. "	and 1 " "
10 "	35 lbs. "	10 lbs. "	and 1 " "
5 "	16 lbs. "	7 lbs. "	and 1 " "
25 "	26 lbs. "	7 lbs. "	and 1 " "
5 "	12 lbs. "	7 lbs. "	and 1 " "
4 "	16 lbs. "	7 lbs. "	and 1 " "
14 "	20 lbs. "	7 lbs. "	and 1 " "
5 "	12 lbs. "	7 lbs. "	and 1 " "
5 "	16 lbs. "	7 lbs. "	and 1 " "
5 "	20 lbs. "	7 lbs. "	and 1 " "
8 "	25 lbs. "	8 lbs. "	and 1 " "

411 charges in all, of one bushel coal each.

We used in 411 charges, from Thursday, at midnight, until Monday at 3 A. M. when we stopped filling.

7235 pounds of ore.

2958 pounds of flux.

411 bushels of charcoal.

And made in Pig shape, beside some 200 pounds of Scrap, 5008 pounds of Iron.

This experiment was not made to see how much iron could be made from either the coal or ore, but simply to determine how small a furnace good pig metal could be made in. The furnace was made to conform to the place we had to build it in, to wit; a Forge Fire, and from the necessity of the case lacked many of the required proportions to use stock with economy.

The result of the experiment was such as to satisfy myself that Iron could be made from the best Lake Superior ores in a very small furnace, made for the purpose, in a place where the proper shape could be used. The furnace in which the experiment was made being only 8 feet high, and hearth, 15 inches sq., 2½ feet bushel, and about 12 by 15 inches at the tunnel head, or filling place. We used a much larger proportion of flux than was needed, and much more than I should have done, had I intended the experiment as a test of ore, flux and coal. The experiment was carried into refining the pig, which proved very satisfactory. Mr. Eddy, we made the trial of refining it, pronounces it good. The wrought iron produced, will speak for itself.

S. R. GAY.

OCEAN STEAMSHIP LINES.—In June 1857, a law was passed by the French Legislature, authorizing an appropriation for the establishment of three lines of mail steamers between France and the United States, the West Indies, the Isthmus of Panama and Mexico. In the exercise of this authority, the French Government have recently concluded a contract with parties of known responsibility, for the establishment and working, for a period of twenty years, of two lines—one from Havre to New York, and the other from St. Nazaire to Aspinwall, with branch lines to the West Indies and Mexico. We are informed on very reliable authority that, although the name of the company to which the concession has been granted is that of V. Marziou & Co., the real party is the Orleans Railroad Company, one of the richest and most prosperous corporations in France, and

whose capital stock amounts to the enormous sum of eleven hundred millions francs. The Annual subscription guaranteed by the Imperial Government for the mail service is close on \$2,000,000, and there is little or no doubt that this great and important enterprise will be speedily carried out, with every prospect of success on the part of those who have undertaken it, and of advantage to France and the United States. It is stated that they will not be ready to operate before the end of three years, so much time is spent in France in the details of organization.

MONETARY AND COMMERCIAL.

The past week has been marked with greater stringency in the markets for money, than has heretofore been noticed for some weeks. This arises from the active preparations making for the paper which matures on the 1st and 4th inst. In view of the demand, rates have slightly increased, and favors lenders rather than borrowers. The supply of currency also is smaller owing to a disposition to contract on the part of the country banks. We quote rates of discount by the regular Houses at 10 to 12 per cent. Outside rates range from 12 to 24 per cent., according to the class of borrowers.

Eastern Exchange is not much changed. Rates vary from 5-8 to ¾ buying, and 7-8 to 1 premium selling. The lower rate being about the average. Business continues active, though the last week has shown a slight falling off both in business done and in collections.

The banks of Virginia has been required by the Legislature of that State to resume specie payment by May 1st.

In New York stocks had not yet recovered that buoyancy of tone exhibited previous to the last two weeks; this is probably due to the active employment of capital in business channels.

The California steamer, Moses Taylor, brought \$1,400,000 in gold. The present prospects of the miners of that State are very flattering. Present indications would also warrant the belief that the coming summer will make known developments of silver in Arizona no less wonderful and important than the gold discoveries of California have heretofore proved. The importance of the precious metals to the currency of the country, renders any intelligence concerning their supply of the highest interest.

SALES AT THE NEW YORK STOCK BOARD—March 28.

\$1,000 U. S. 6's, '65	103½
\$10,000 U. S. 5's, '64, cou.	115½
12,000 Miss. 6's	82¼
15,000 do.	82½
25,000 do.	82¼
1,000 do.	82½
5,000 Cal. 7's	87
5,000 Ind. St. 7's, '68	105
1,000 Tenn. State 6's, '90	89
2,000 Reading Bonds, '86	67
5,000 Ill. C. B.	93½
2,000 La C. & Mil. G. B's	34½
5,000 do.	84½
2,000 Chicago & Rock Is.	95
5,000 Ohio State 6's, '60	100
1,000 Erie 2d Mort. bonds	94
1,000 Erie Bonds '75	57
2,000 Mich. C. S's	100½
100 Shares New York Central	68
150 " Erie R. R.	23½
100 " Hud. River R. R.	27½
150 " Harlem R. R.	12½
1425 " Reading	47½
35 " Mich. Cent.	66½
150 " Mich. S. & N. Ind.	92
350 " Mich. S. & N. Ind. pref.	45
15 " Panama	105½
50 " Galena & Chicago	91½
500 " Cleveland & Toledo	44½
200 " Chicago & Rock Island	76
110 " La Crosse & Milwaukee	9
43 " Pacific Mail St. Co.	78

THE CARS FOR EGYPT.—Wason & Co., of Springfield, Mass., will ship this week ten passenger cars which they have contracted with the Pasha of Egypt to build for the Alexandria and Cairo Railroad. The cars are packed in boxes, and two workmen go out in the same ship. The remaining thirty cars are to be built and forwarded before the 1st of July. A splendid drawing of the cars is sent to the Pasha, and will doubtless please the old fellow very much.

LAND GRANTS IN WISCONSIN.—The General Land Office gives notice that "the grant of land to Wisconsin has been so far adjusted as to authorize the release from withdrawal of the vacant offered lands outside of the six miles limits" on the La Crosse and Milwaukee road to St. Croix Lake, and on the North-eastern road from Fond du Lac to the State line. Also, on the route from St. Croix to Lake Superior, sufficient time having elapsed to make survey of the route and selection of lands, and none having been made, the lands will be restored to market, with the proviso "that the railroad grant will attach to such of the odd numbered sections as may be selected under said act, within the six miles limits of such parts of the said road as may be actually surveyed and staked off before the day fixed for the restoration of said lands." The Menasha, Mineral Point, La Crosse, Hudson and Eau Claire offices open on Monday, the 5th day of April, for the lands along the La Crosse and Milwaukee and Fond du Lac and Superior railroads. The Hudson, Superior and Eau Claire offices open on the 3d day of May for the lands along the route of the road from St. Croix to Superior City and Bayfield.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

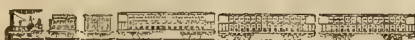
SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858. VOSE, LIVINGSTON & CO.,
Mar. 23, 1858. 9 South William St., N. Y.

INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURG.

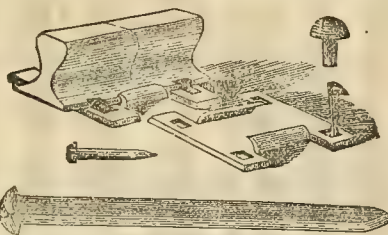
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LOEB, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.
Feb 25 CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.30 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.
Office, 31 Main Street, west side, 5 doors north Madison House.
Cincinnati, Jan. 31, 1855. [Jan 1-17] Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English post, or at a port in the United States, will be made by the undersigned, THEODORE DEH

no 13 10 Wal ar Broadway, New York.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

THOMAS D. STETSON,

Mechanical Engineer,

AND
AMERICAN AND FOREIGN PATENT AGENT,
No. 36 CHATHAM STREET, N. Y.

Entrance 5 Tryon Row.

Applications for Letters Patent. Careful written Opinions of Inventions. Important aid in bringing out inventions. oc23

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
Feb 5-11 10 Wall st., near Broadway, New York.

ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, J of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

ly23-1m

D. M. CARHART. TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

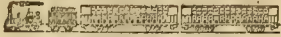
For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
oc19-6m Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers, Removed to No. 67 West 6th St.

CINCINNATI, O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy-27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

ap8

Or SUMNER SMALL, Boston, Mass.

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb-5-ly

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858.

For the Grubbing, Grading, Masonry, Bridging and Cross Ties, for the FIRST DIVISION of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK,

Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.

March 18—21.

IRON BOILER FLUES

PASCAL IRON WORKS.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,

PHILADELPHIA.

[205]

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

J. H. GOODMAN & CO.,

no. 7 Wall st., N.

Feb. 7. '56-2m.]

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch. ap.20

MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns, ENAMELLED HEAD LININGS,

Brass and Silver Trimmings.

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

JOEL C. LANE

feb4tr

MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.

These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floors, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 50 feet span, 8,000 lbs. weight, \$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2500 lbs. weight, \$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 52 squares, \$1300, or \$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES,

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc.; and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

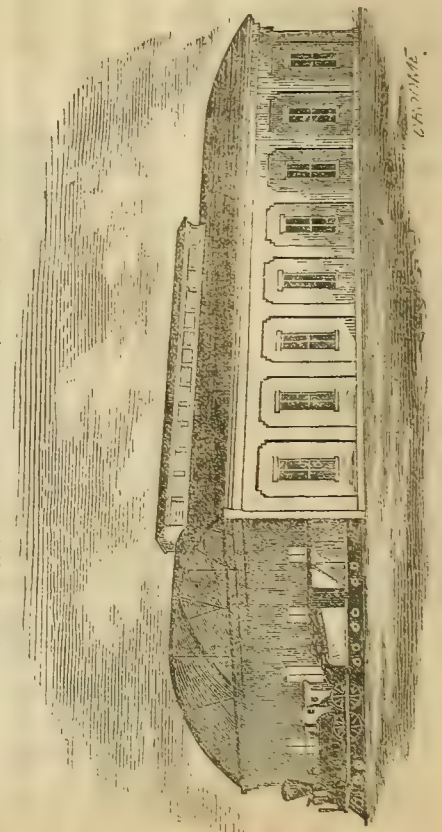
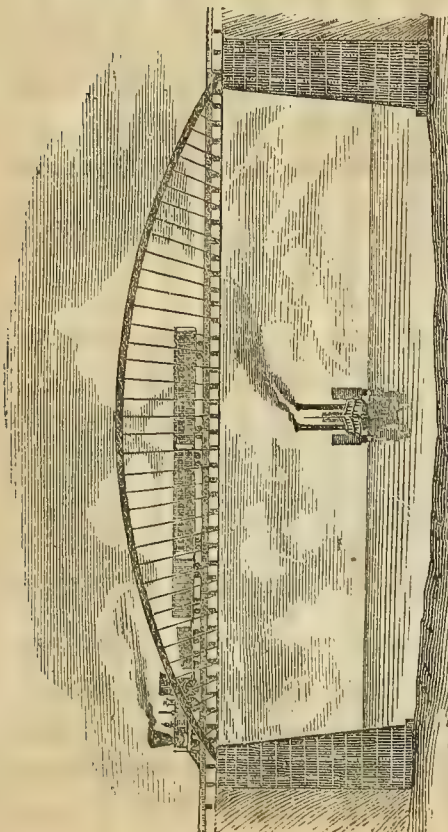
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 66 West 3rd Street, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 13, 1858.—Gm.



Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

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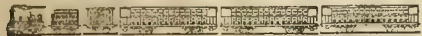
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Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

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1857.

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1857.

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THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:35 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

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E. F. FULLER, General Ticket Agent.

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FOR INDIANAPOLIS—At 6 A. M., and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

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And to all Eastern and Northwestern Cities.

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LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

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HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest for East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

"STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS TRAIN** on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

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Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

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BAGGAGE CHECKED THROUGH.

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Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:15, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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W. H. SMITH Agent

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Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

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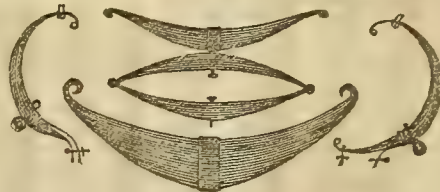
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JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Au16.1y



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May 19

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EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

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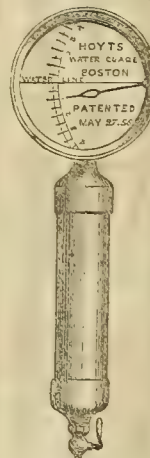
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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, }
W. WRIGHTSON, } Editors.

CINCINNATI:

THURSDAY MORNING, APRIL 8, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

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Subscriptions and communications addressed to

WRIGHTSON & CO.,
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The following gentlemen have been this week elected Directors of the Pacific Railroad Company at St. Louis:

John C. Rust, Charles K. Dickson, George Knapp, Geo. R. Smith, Pettis County; L. M. Kennett, John J. Anderson, John G. Priest, H. I. Bodley, B. W. Grover, Johnson County; John M. Wimer, B. W. Alexander, Samuel Gaty, James McDonough.

M. Wm. M. McPherson, late President of the Company, failed to be re-elected one of the Directors.

VIRGINIA RAILROADS.—The legislature of Virginia has passed a bill appropriating \$800,000 to the Covington and Ohio railroad.

Appropriations have also passed the Assembly amounting to \$1,200,000 equally divided among the Orange and Alexandria, Manassas Gap and Alexandria, Hampshire and London, and the Norfolk and Petersburg roads. It is believed that there will be no difficulty in passing these appropriations in the Senate.

The Senate has passed the act incorporating the Norfolk and St. Nizaire Navigation Company.

PROPERTY, DEBT AND TAXATION IN OHIO.

It is a very interesting process to trace the exact progress of any State; but, if that State happens to be one of remarkable growth and prosperity, it is doubly interesting. In fact, if we could trace such a progress precisely, from the beginning to the end, it would be nothing less than tracing out all the causes which influence the destiny of States and communities, and their effects in the social and material growth of human society. It would solve the social problems of society completely. This solution, perhaps, we shall not be able to reach exactly; but, if statistical inquiries be continued persistently, and the results be recorded at equal periods for a long time, we shall ultimately be able to reach almost an exact solution. The State of Ohio has commenced a statistical investigation, which, if continued during a series of years, will result in almost a science of society. Some portion of this inquiry has been produced in the Report of the Commissioner of Statistics, which embodies some very interesting results. In a recent number, we stated the aggregate results of the extent and relations of transit lines in Ohio. We shall now avail ourselves of the same Report to set out some of the leading facts in regard to debt, taxation, and property.

The valuation of property in Ohio for thirty-two years, has been as follows:

Years.	Aggregate Value.
In 1825	\$ 59,527,336
In 1841	128,353,657
In 1845	144,160,469
In 1850	439,966,340
In 1855	860,877,354
In 1857	849,414,599

The slight falling off in 1857, was owing to a new rule of taxing personal property, by which a large amount which was placed on this list of 1855, was taken off in 1857.

In thirty-two years, the value of property in Ohio has increased *fifteen fold*! In seven years it nearly doubled. From 1825 to 1857 the population of Ohio was about trebled; but, we find, that the increase of property has been five times more rapid than that of population! It is true, that the State valuations are not the just or market value of property, "because they are made at a cash value, always much lower than the price on ordinary selling terms. But these valuations afford a fair standard of comparison, and if we add about twenty per cent. to the aggregate, we shall have the real value of property in Ohio, at this time making *over a thousand millions of dollars*." This fact, and its immense growth since 1825, are most extraordinary! The question, what has caused this very rapid growth in wealth? One great cause may be found in these historical facts.

1. In 1825, Ohio commenced work on her system of canals, and in 1830 had nearly finished them.

2. In 1843, the Little Miami Railroad was

commenced, and in 1850 was commenced the great system of railroads which has been nearly finished since.

3. In 1836 and 1837, was commenced also a large number of turnpikes, many of which were finished.

Looking to these facts, as connected with the progress of wealth, exhibited in the above table, it is very obvious that the great number of canals, railroads, and turnpikes have had great influence on the material progress of the State. No doubt, other facts also had great effect, but, unquestionably, this had the greatest effect?

Let us take, for example, the effect on the counties of Hamilton and Cuyahoga, where the system of canals and railroads mainly center. The increase of property in these counties, was as follows:

	Hamilton.	Cuyahoga.
In 1841	\$ 10,760,494	\$ 3,065,569
In 1845	12,422,091	3,363,369
In 1850	55,670,631	10,750,989
In 1855	112,945,419	37,435,712
In 1857	120,890,791	36,047,344

We see that the counties in which Cincinnati and Cleveland are situated have had the value of property increased *twelve fold* in sixteen years. The vast increase of commercial facilities, in doubling the value of produce, and enabling manufacturers to send off their fabrics, is, no doubt, the principal cause of this growth. Had Ohio been in 1850, where she was in 1825, as to the facilities of transportation, her property could not have been worth half so much.

2. **TAXATION.** The proportion of taxes and the objects for which they are raised, are among the most interesting elements connected with legislation. In Ohio the taxes are of three kinds, viz: local, State, and national. The local are for schools, bridges, roads, benevolent institutions, expenses, etc. The State Taxes are for the State Government, and the public debt. The national taxes are not levied by direct tax; but, are paid indirectly through the consumption of foreign goods, on which duties are paid. The people of Ohio pay a full proportion of the duties on foreign goods, and being about one-tenth of the white population, they, therefore, pay one-tenth of the revenue derived from taxes. The taxes paid by Ohio in 1857, stated on this principle, are as follows:

Total Taxes levied by the State, Local and general	\$8,673,298
By the United States Government indirectly	6,000,000
Aggregate	\$14,673,298

Supposing the real value of the property in the State to be \$1,000,000,000; then the rate of taxation is about 1.40 per cent. Supposing, also, as we do, that the income of property is about eight per cent. gross; then the *net* value of property is about 6.60 per cent., and if so, seven per cent. is as high as any one should pay for interest in any general business.

3. DEBTS. The Commissioner of Statistics has undertaken the solution of a problem which, if it can not be solved immediately, may in time, and will prove interesting and valuable. This is to ascertain the amount of debt, of all kinds, in the State. He states this as follows:

Debt of the State.....	\$16,402,005
" of Counties and Municipalities...	15,000,000
" of Mortgages.....	77,096,452
" of Judgment.....	7,500,000
" of Commerce.....	82,811,000
" of Railroads.....	55,000,000
" of Private persons.....	5,000,000
" of Banks.....	25,000,000

Aggregate.....\$283,809,547

This is but little more than one-fourth the value of property.

OHIO AND MISSISSIPPI RAILROAD.

We have received from Mr. Lough, the general freight agent of this line, a circular of freights on Fourth Class articles, ranging from 25 to 45 cents per hundred pounds. Freight trains leave Cincinnati at 4.20 A. M., and arrive at St. Louis at 5.30 P. M. the next day, making the trip in 37 hours 10 minutes. The whole distance is 340 miles. The trains, therefore, make an average of a little over nine miles per hour.

Shippers will, therefore, see that while their freight is taken through in good season, it is also taken at rates very low, when they remember that the railroad charges cover insurance also.

To illustrate this statement, a case may be referred to, which occurred in this City within the past few days. A gentleman purchased a lot of merchandise here, the bills amounting to \$4,500, and the weight to 6,000 lbs. The insurance on the above amount on the very best boats, would be not less than three-fourths per cent., which would amount to \$33 75. The railroad freight on the same, at the above rates, is only \$33. On many boats the insurance is still higher, say from 1 to 1½ per cent.

And while the railroad is thus taking freight at low rates, it is doing a safe business. It runs its freight trains at a speed which will not injure the road, and it gets a remunerating price for transportation.

JOLIET AND CHICAGO R. R.

This road is thirty-five miles in length and was built for the purpose of giving the Chicago, Alton and St. Louis Railroad an independent track to Chicago. It was begun last fall, and is now complete. The capital stock is \$1,000,000. And so far the stock alone has been used for construction. The road has yet to be ballasted, fenced, depots to be built and depot grounds secure. To accomplish this, the Company propose to issue \$300,000 of first Mortgage Bonds.

The road has been leased to the Chicago, Alton and St. Louis Railroad at a rental of \$10,000 per month. This will produce for the Company a net revenue of a little less than nine per cent. on the whole amount of stock and bonds.

Railroads.

EAST TENNESSEE AND VIRGINIA R. R.

PRESIDENT'S REPORT.

Gentlemen:—At our last annual meeting, we reported the laying of track as having reached from Bristol to a point somewhat short of Union. From the 1st November, 1856, including the work done at both ends of our line, we have laid fifty miles of additional track during the past year, (all of which is now open and in daily use). Our first shipment of iron in February last, was detained at sea seventy days, driven by tempests of unusual severity; by which we were hindered at least one month, and much other time has been lost during the year from unavoidable delays.

We have lately received 1,500 tons more, which is now being put upon the track, and with the exception of 300 tons lying at City Point, all have been paid for in bonds of the State as per contract. That remainder is to be paid for as soon as we draw bonds to meet it. We were short of iron at the western extension, and contracted for 100 tons of iron of Col. Tate, of Memphis, to enable us to reach Bull's Gap. But little of this last was required, the remainder is on hands ready for use when ever the grading is finished. It will require but 1,500 tons more to finish the whole line. This was ordered in the summer by our contractor in New York, to be delivered from the 1st to the 15th inst., but afterwards finding it impracticable to get the grading finished to draw the bonds in conformity with law, to meet the delivery of the iron at the time, we had, reluctantly, to countermand that order, which has still to be supplied. Iron can now be readily obtained for the cash, at reduced rates. The financial disaster affected the price as well as that of the bonds, and there need be no delay in getting it delivered at a reasonable notice. The money to pay duty presents the greatest obstacle, since the suspension of banks, and depreciation of paper currency, but as yet we have kept the work in motion. Chairs, spikes, cross-ties, freights, and track-laying are costing us at the rates of the previous year. But the cost of graduation has been greatly enhanced, owing to the scarcity and high price of provisions and labor during the past year. By a very liberal indulgence of the Virginia and Tennessee, and South Side Roads, over which we have had our iron freighted, on a credit we have been greatly relieved. We have likewise purchased 600 kegs of railroad spikes and a Locomotive from Mr. McDaniel, President of Virginia and Tennessee Road, on extension of credit; also the iron purchased of Col. Tate of the Memphis Road on credit. On the same liberal conditions with these, should be mentioned favors shown by

Maj. Wallace in our freights over the East Tennessee and Georgia Railroad. Those companies have all manifested the deepest interest in the progress and completion of our work, as a link essential to that unity which must bind us in one common interest.

The grading, it is believed, can all be finished by the first of March. So soon as the excavation at Bull's Gap is completed, it is our intention to resume track laying at that end with a second force of hands, at the same time that we continue the extension westward, as we are now doing, when, with a double force, the work will soon be urged to completion. We have again resumed since the 10th of November, laying down iron westward, and have reached several miles in extent; and it is hoped the work will be continued without farther interruption from the eastward. Our principal depots, with the exception of one at Greenville, are either completed or in a state of forwardness insuring their being speedily finished, and we have spikes and chairs on hands or in contract to finish the whole road without delay.

The duty required to be paid on the remainder of the iron to finish the road, may be put down at a gross sum of \$25,000; the bonds required to meet the balance of iron is \$102,600, and for the remainder of chairs required, about \$8,000; and perhaps a like sum required for balance of spikes, and about \$15,000 may be put down, gross amount for track laying, which gives us the amount for iron and equipment, exclusive of freights, and without additional rolling stock, of \$158,600 to place the road in through connection. To balance which, according to recent accurate measurement of road, the whole length is 130 miles five feet. At \$10,000 per mile per State grant, on which we are entitled to, \$241,000 being the balance of the whole amount of State loan, the whole being \$1,300,000, of which we have drawn \$1,059,000 which after meeting the \$158,600 as above, leaves a balance of \$82,000 bonds in excess, to meet discounts, freights, and other contingent expenses. By a previous act granted by the stockholders, we have issued during the past year \$100,000 first mortgage bonds of Company after State lien, of which we have sold eighty-nine thousand dollars. Most of the remainder has been put in contracts for work, with a balance on hand yet unsold. The sales were made chiefly at 40 per cent. discount to raise means to put in the work. Of this sum there remains unexpended upwards of \$19,000, and we negotiated a loan on time of \$40,000, to be received shortly. The remaining available stock uncollected may be put down at \$30,000, which leaves \$89,000 of assets with income of road in addition, to meet the remaining grading, cross-ties and floating debts of the company. In addition to this, we are now having prepared

\$300,000 second mortgage bonds of the Company, voted by stockholders on the 4th Sept. last, at Greeneville. The income of the road can be only conjectured. But judging from the past few months our gross receipts will not fall short of \$10,000 per month for the first six months. One half of which will be required to meet current expenses. We think it entirely safe to put the net income at \$5,000 per month for next six months, after which time the road being finished, our receipts will be greatly enhanced. During the month of August our gross receipts, including mail accounts, amounted to near \$14,000. Since that time the decline in the wheat market has greatly affected our freights. Whilst the crops of East Tennessee have greatly exceeded that of any previous year in amount, and are of excellent quality, most of it is yet on hands for the want of market, but it will doubtless pass off by the railroad during the winter and spring, and add largely to our receipts.

The local business of every kind, as well as travel, will increase as the road approaches completion. But most of all will be the increase of through travel. The experience of the last year under all the embarrassments of staging, affords demonstrative proof that the through travel will be greatly enlarged on the completion of the road, not only by direct travel from off the lines leading to Nashville and Memphis, but from States bordering on the Mississippi as far south as New Orleans. We are also to receive large accessions from Southern roads, from portions of Georgia and Alabama as far as Mobile. This last had not been taken into the account of our previous calculations, until passengers themselves have assured us that such *would* be the case, especially during the hot months of Summer and Autumn, when the inhabitants of those lower countries seek the mountains, with their fresh and exhilarating atmosphere, and their numerous medicinal springs of various qualities, and "fashionable resorts" through Virginia and Tennessee—especially the former. In addition to the before mentioned liabilities, we must not forget to mention the January interest on State loans, and mortgage bonds of the Company, which may be set down at \$44,000, which must be faithfully and promptly met, and from \$12,000 to \$15,000 obtained on private security; after which we may safely rely on the earnings of the road and stock, as is believed to meet all coming interest.

We have been extremely anxious to press this work to a speedy completion. The members of the present Board have used their best exertions, and pledged their credit individually and collectively to a large amount to raise the means, and with few exceptions it may be said, they would command as much credit as any equal number of men in this end

of the State, which they have cheerfully tendered on various occasions to the Company. And true friends of the road outside of the Board, and in some instances *not* stockholders, have offered their names as endorsers of our paper. But every business man in the State knows that the banks during the past Summer, have ceased their discounts, excepting on small accommodations and on short time and to their regular customers only. This was not only the case in Tennessee, but throughout the South and South-west, as well as in the East. Loans of this description could have availed us but little or nothing, because we should have needed them just as much at the maturity of the loans as at the time of procuring them. Unless we could have procured money on something like twelve months time, it could have been of very little permanent aid; but after that time the proceeds of the road as is believed will be sufficient to refund such loans. The second mortgage bonds have already aided us in securing loans, and will still aid us more. When we take into account the general contraction and suspension of our banks, the failure of crops during the previous year, and the small gleanings left of our stock list, and the resistance of their payments on the part of delinquents, and the general decline of State and railroad stocks, when we compare the amount of work done, and expense incurred during the past year, under *these* and other embarrassments which might be mentioned, it is a source of satisfaction and gratification to its true friends, that the work has extended beyond that of any preceeding year.

The following table will show approximately the amount expended and for what purposes. It has been prepared with some care, though not pretended but that some inaccuracy may exist; yet it is believed to be substantially correct, and we produce it for the satisfaction of those who really desire to know our progress through the closing year as compared with those that preceded it, viz:

From 9th November, 1856, to October, 1857, ten months and twenty-one days, or say eleven months.

Construction.....	\$156,378 50	
Iron and Equipment.....	416,947 45	
		\$573,325 95
Interest paid.....	64,376 62	
Interest upon Iron and Equipment fund.....	44,890 00	
		109,266 62
Land Damages.....	7,921 55	
Sinking Fund.....	6,000 00	
		13,921 55
Bills which have not been rendered:		
To which may be added Freights on S. S. Railroad.....		
		13,000 00
Amounting to.....		\$709,514 12
To which should be added for October Estimates.....		16,000 00
Total.....		\$725,514 12

The increase of debt as shown per Secretary and Treasurer's Report is \$103,111 60. A much larger expenditure than has ever been made in a single year before on the work;

and at the prices paid in former years, with the exception of graduation, which has been considerably enhanced from the unprecedented scarcity and high prices of provisions.

It is gratifying to the friends of the road, to find that from year to year, on the smallest subscription of stock that ever headed such an enterprise, (and much of that not paid) we have moved steadily on without stopping, with increased speed, until within a few brief months at most, it is demonstratively certain, we shall be able to put down the last rail, and at a cost less than other similar roads within the State were built during the same period, (See Com. Payne's Report to Legislature of Tennessee present session,) and the fears of failure have not been realized. The following table will exhibit the annual expenditure of the Company from the commencement of our work from our first annual report of Nov. 28, 1850. Our expenses of that year were principally for Engineering purposes, and are as follows up to the present time, viz:

1st Year.....	Amount \$	6,200 00
2d ".....	"	25,840 41
3rd ".....	"	46,276 13
4th ".....	"	265,152 52
5th ".....	"	277,779 73
6th ".....	"	421,658 88
7th ".....	"	417,229 30
8th " (without the fractions).....		709,000 00

Amounting to.....\$2,169,136 97

It will be seen that the above estimate is something less than the gross amount shown by the Secretary and Treasurer's balance sheet. This table has been made out from the annual reports of the former Secretary and Treasurer, and has not been accurately compared with the items making up the whole account of the expenditure shown by the present balance sheet of the Company.

It is however under the Secretary's figures, and the discrepancy, if any, may effect each year in a corresponding proportion; and as favorably it is believed to the last, as to any preceding year.

The expenditure of the year now closing, has exceeded that of any previous year by more than \$300,000, and at the prices of former work, as per former contracts, with the exception as before mentioned of grading. In this, as in former reports, is included interest account, which has been steadily growing from year to year, and constitutes at the present a heavier item than that of any of the former years.

The grading yet to be done is being completed as fast as a reliable force upon it can do it. We have not the means of knowing the precise cost of what remains, not having seen the engineer in charge; but according to the report of Mr. Aiken, made to the committee of Board up to August 1st, there remained the rise of \$56,000 to finish grading and cross-ties, to complete that department.

The Report of the Secretary and Treasurer, and of the superintendent of both divisions of

our road accompany and make part of this report, from which you will more particularly learn many details of interest. Also, Mr. Aiken's Report handed in since writing the above, and herein submitted.

In conclusion, we say, the close of the work is now near at hand, and in some way the means will be found for its completion, when our highest anticipations of its benefits will be realized, and an invaluable legacy conferred on our posterity.

SECRETARY AND TREASURER'S REPORT.

Statement of the condition of the East Tennessee and Virginia Railroad Co., on the 1st day of October, 1857.

Office Expense.....	\$ 475 40	
Engineering Expenses.....	53,765 14	
Contingent Expenses.....	3,949 37	
Agents Expenses.....	5,092 56	
Salary of Officers.....	22,100 25	
Land Damages.....	13,552 62	
		\$100,305 44
Personal Estate.....	2,927 53	
Real Estate.....	2,742 00	
		5,669 43
Amount to debit of Agents and others.....	164,677 08	
Amount to debit of Banks.....	14,856 97	
		179,534 05
Construction.....	924,954 92	
Iron and Equipment.....	1,001,504 53	
		1,926,459 75
Interest paid \$158,423 52 less int. received \$51,226 28.....	107,197 24	
Interest of Iron and Equipment paid \$77,018 28, less received \$575 00.....	76,493 28	
		183,690 52
Due from stockholders.....	130,581 59	
		130,581 50
Bonds of Jefferson County.....	3,000 00	
Bonds of Washington County.....	5,000 00	
Hypothecated Bonds.....	1,000 00	
		9,000 00
Bills receivable.....	62 89	
Sinking Fund.....	6,000 00	
Profit and Loss.....	14,274 88	
Cash.....	1,320 58	
		21,658 35
Total.....		\$2,556,889 04
Capital Stock.....	\$ 626,075 00	
State of Tennessee, Bonds loaned for bridges.....	\$300,000 00	
Bonds loaned for iron and equipment.....	989,000 00	
		1,289,000 00
Company Bonds endorsed by the State.....	200,000 00	
		200,000 00
Mortgage Bonds 1st after lien.....	\$100,000 00	
Less not yet issued.....	8,500 00	
		91,500 00
Stock Bonds.....	63,225 00	
		154,725 00
Exchange.....	32,690 38	
		32,690 38
Amount to Cr. Br. Bank E. T. at Jonesboro.....	8 99	
Amount to Cr. Ex. Bank Tenn.....	5 00	
		13 99
Am't. to Cr. of Officers, Agents and Engineers.....	14,832 69	
Am't. to Cr. of Contractors.....	102,374 08	
Washington Co.....	365 10	
		117,371 87
Bills Payable.....	53,599 12	
Bills Payable with Coupons.....	1,650 00	
		55,249 12
Amount to Cr. of Va. and Tenn. R. R. Co.....	28,402 09	
Amount to Cr. Memphis and Charleston R. R. Co.....	6,850 05	
		35,252 14
Rent.....	162 88	
Transportation West. Division.....	44,314 89	
Eastern Division.....	1,833 77	
		46,148 66
Total.....		\$2,556,889 04

The last Legislature of Florida having provided for the construction of a canal connecting the waters of the St. Johns with those of Indian river, Gov. Perry has appointed commissioners to survey and lay out the work.

SOUTHERN PACIFIC RAILROAD.

We publish, by request, the following article from the New Orleans *Crescent* of March 25th. We do not, however, see the least grounds to change the opinion we have previously expressed as to the manner in which this affair has been conducted by this company. The fact is, simply, that the Company was published abroad as failed; whether true or not the statement was made and published in the newspapers, and without giving time to correct this impression, the Directors proceed to sell and forfeit the stock. We do not object to the principle of selling delinquent stock, but we do object to the summary manner in which this was sold. The *Crescent* says:

On the 17th of February last, pursuant to notice previously given through the medium of the public press, the Directory of the Southern Pacific Railroad Company sold at auction a large amount of stock upon which installments remained due and unpaid.

This sale was alike necessary and proper for more than one reason. The delinquent stockholders had no just claim to further indulgence, which would work to the detriment of the paying stockholders, and the debts of the Company could not be paid without available means, nor the great enterprise be made to progress as it properly should. These facts are, in themselves and without further explanation, amply sufficient to justify the action of the Board of Directors.

But, in order that there might be no reasonable grounds for complaint, on the part of delinquent stockholders, and to enable them to redeem their stock if they saw fit, the Secretary of the Company has been directed to inform such stockholders, "that the purchasers of stock sold by this Company on the 17th of February last, have agreed to allow the former owners the privilege of redeeming the same, by paying the installments due, until the 16th of April" next; and he is further directed to say that "all stock not redeemed by that date will be transferred on the books of the Company to the purchasers thereof." This is about as fair a proposition, the circumstances taken into consideration, as any reasonable man could desire.

It makes no difference to the Company whether the old stockholders redeem their stock or not, or whether the new owners pay the money on the installments due. The Company want the money, and it is, consequently, of little moment from which source it comes from, so they get it. Still, to avoid the slightest appearance of unfairness, the offer above mentioned is held out to those stockholders who have been derelict in meeting their obligations. This latter class would do well to avail themselves of it without delay, for they will thereby not only save what they have already paid, but become part owners of a mighty work which will reimburse them ten-fold in the long run. As the class of stockholders referred to are scattered all over the Union, and as each journal may have among its subscribers a number of such stockholders, we would suggest to each and all of our newspaper cotemporaries that they spread the facts of the case before their readers at as early a day as practicable. It may enable many of their patrons to redeem stock which must ultimately become valuable and save

them from actual loss, besides circulating abroad valuable information respecting an important matter.

One word as to the prospects of this Company. The rights of the corporation are secured and the Texas charter, with all its magnificent endowments, saved. The road is progressing. Its course is onward. Friends are continually coming to its support. Besides, it is a great southern work. Three-fifths of the stock is held in the South. This is a desideratum not to be despised. And as the stupendous land donation of Texas secures the completion of eight hundred miles of the road, its successful completion can hardly be set down as problematical.

PITTSBURGH, FORT WAYNE AND CHICAGO RAILROAD.

The first annual meeting of the stockholders in this consolidated company, was held at Pittsburgh, March 31. As this is an important road, and as the meeting appears to have taken cognizance of the fact that the stockholders constitute the Company, and not the officers only; we give the proceedings in full as we find them in the Pittsburgh Gazette:

There were about two hundred stockholders present, and the meeting was organized by calling Lestor Bliss, of Delphos, Ohio, to the chair. R. B. Sterling, of Pittsburgh, and T. D. Messler, Auditor of the Railway Company, were chosen Secretaries.

The first business in order was the reading of the report of the Directors, by George W. Cass, Esq., President of the Board. This occupied considerable time.

The report having been read, Mr. Ferguson, of New York, moved its acceptance, and with it laid upon the President's desk the following resolutions:

Resolved, That the thanks of the shareholders be and are hereby presented to the President of the Company for his clear and able report, and that, in accepting the same, undiminished confidence in the successful result of the enterprise, so soon as the line shall be finished and put in operation to Chicago, is hereby expressed; that while we assent to and approve of the determination of the Directors to make all purchases of supplies for coal, and prompt and regular monthly payments to the employees of the Company; they now enjoin upon them the duty and necessity of making provision at the earliest day possible for the payment of the arrears of wages due to employees on the line of the road—and with this view to carry to its furthest extent as stringent a system of retrenchment and economy in the administration of its affairs as is consistent with the permanent interests of both creditors and shareholders of the Company. Adopted unanimously.

Mr. McGarge, of Philadelphia, submitted, in addition, the following:

Resolved, That this meeting instruct the Board of Directors about to be elected to discontinue the payment of salaries or wages per diem to any of its officers, except the chief executive officers, for services rendered as Directors of this Company.

2. That this meeting instruct the Board of Directors to so modify the By-laws of this Company as to prevent the purchase of any supplies or materials for the road, either directly or indirectly, from any member of the Board, officer or agent of the company.

3. That the Board of Directors be instructed to have a book, with a list of the stockholders of the Company, prepared annually, 3 months prior to an election of Directors, for the purpose of exhibiting to any stockholder who requests it, the number of shares held by each individual, firm, or corporation, interested in the Company. Adopted.

Mr. Sargent, of New Brighton, then offered a resolution proposing inquiry into the various affairs of the Company, to which there were proposed amendments and amendments to amendments, substitutes, &c., all of which were, at length, on motion of Jas. Park, Jr., of Allegheny, laid upon the table.

R. R. Donnelly, of Wooster, Ohio, offered the following:

Resolved, That the present Board of Directors be requested to furnish forthwith the stockholders with a statement of the several amounts paid each member for services as President, Vice President, and Directors of said road during the last fiscal year.

To which Mr. Street, of Salem, O., offered the following in addition:

Resolved, That a committee of three be appointed to ascertain the number of clerks employed and their salaries respectively, the amount of printers' bill, the amount paid each Director respectively since the consolidation, the amount paid Solicitor of Co, and his assistants. Adopted.

Mr. Williams, of Ft. Wayne, offered the following:

Resolved, That the Chairman be authorized to appoint an examining committee of three shareholders to examine the books, accounts and vouchers from the 1st of August, 1856, to 31st of Dec. 1857, and report the result of this examination to the shareholders at their meeting on the 1st Wednesday of Sept. next. Adopted.

Madison Reynolds, of Canton Ohio, offered a resolution that the shareholders of each State here present meet to-night (Tuesday) at separate places, to select the candidates to which each State may be entitled. Adopted.

Mr. Winslow, of New York, offered a resolution touching the duties of the company to look carefully after the payment of the interest as it falls due on the funded debts of the company, as well as for the sinking fund, which are pledged for the liquidation and for the payment of the other debts of the company. Adopted.

A resolution in favor of keeping a list of the names and places of employment of all persons in the employ of the company, for inspection, was then adopted.

Mr. Cass then made some remarks relative to the necessity of the completion of the road to Chicago.

A preamble and resolutions were then submitted to the meeting by him.

Wm. R. Brown, Esq., of Pittsburgh, moved that the meeting adjourn until to day at 9 o'clock, and in the meantime the resolutions be printed and placed in the hands of shareholders. Lost.

The following is the paper read by Mr. Cass:

The preamble sets forth the necessity of the completion of the road to Chicago, and the resolutions, that the Board of Directors to be elected hereby have the assent of the shareholders to make such contract or arrangement (as may legally be made) with parties furnishing cash or means, to an extent that shall secure the completion of the road within eight months, as will fully assure to

said parties the proper management of the business of the road, and the judicious expenditure of all means coming into the possession of the company, whether from transportation receipts, sale of bonds or otherwise.

Resolved, That if necessary, the contract or arrangement may, at the discretion of the Directors, extend to a general but well defined supervision over the finances and operations of the company, until all or such portion of the advances are repaid as may be stipulated for in the agreement, or until the net earnings of the company will insure a market value to the stock or bonds of the company, that will appear to render certain the punctual payment of the interest on such securities as may be used in payment for the work to be executed.

Resolved, further, Nothing contained in the foregoing resolutions shall conflict with existing agreements in regard to paying floating debts or the payment of interest not funded, or mortgage debt nor with the pledges to the sinking fund.

These resolutions were adopted, and the meeting adjourned until 9 o'clock this morning.

The following gentlemen were elected Directors for the year.

G. W. Cass, J. Edgar, Thompson W. Robinson, Jr., and W. Wade, of Pennsylvania; John Larwell, G. W. Bailly, C. M. Russel, and Robert M. Kelly, of Ohio; Samuel Hanna, J. K. Edgerton, J. L. Williams and A. L. Wheeler, of Indiana; John Evans and W. B. Ogden, of Illinois, and R. H. Winslow, of New York.

Geo. W. Cass was re-elected President, and Joseph K. Edgerton Vice President.

MICHIGAN SOUTHERN AND NORTHERN INDIANA RAILROAD.

The Report of the Directors of the Michigan Southern and Northern Indiana Railroad Company, for the year ending December 31st, 1857, has just been issued. The present board were elected in September last, and entered upon their duties October 24, so that they have had charge of the affairs of the Company but a few months.

In the construction department they found the accounts complicated, owing partly to the distance of the operations from the office of the Company, in this city, the Chief Engineer keeping the account under his own supervision.

But aside from this expenditure in the field, large payments for materials, services and other objects, were necessarily made originally at the Treasurer's office. This will in part account for the great difference between the amount stated in the Chief Engineer's report and the footings of this account on the Treasurer's books.

The total amount charged to construction on the books of the Treasurer, May 1, 1857, exclusive of equipment and Detroit and Toledo road, was.....\$12,559,443 84
The same, December 31, 1857, was.....\$13,134,847 56
Amount for equipment do. was.....1,607,906 21
Do. steamboats do. was.....676,932 23

Total, road, equipment and boats.....\$15,419,686 00
Total for road and equipment only.....\$14,742,753 77
The cost of roads and equipments as stated by the Chief Engineer, so far as relates to his department, as by his report annexed, is.....10,369,468 42

Difference.....\$4,373,285 35

To make up this difference, we draw from the Treasurer's books as follows:

Losses on sale of bonds from June, 1850, to September 1, 1857.....\$1,054,553 30
Losses on sales of stock of the Company from December, 1856, to September 1, 1857.....349,531 06
Interest, commissions and brokerage from 1850, to December 31, 1857, including coupons paid upon bonds issued for construction of the various lines until they were severally opened for use.....1,249,029 56
Steamboat charters.....172,568 80
Sundry entries, including part expenses of

New York office, salaries and miscellaneous items, during seven years.....1,547,602 63
\$4,373,285 35

The contract for the lease of the Detroit and Toledo road, 51 miles, was made, in 1856, with a payment of 8 per cent. on the full paid stock of the Company. The Michigan Southern Company own 2,820 shares, and 1,500 are owned by individuals. The cost of the road has gone into the general liabilities of the Company, and is as follows:

In Michigan.....\$1,202,820 93
In Ohio (7 miles).....144,034 66
Total.....\$1,346,855 59

This includes \$150,000 for depot and lands at Detroit, where further large expenditures may be expected, in connection with the Detroit and Milwaukee Company.

The Jackson Branch, 42 miles, was opened about the 1st of January. Large traffic is expected from the newly discovered coal fields in the vicinity. The Company has no new works on hand or in contemplation.

Liabilities, as of January 1, 1858.

Capital stock.....\$8,876,400 00
Funded debt.....8,593,000 00
Floating debt.....1,866,684 44
\$19,336,084 44

This includes \$1,600,000 of the second mortgage bonds recently subscribed for by stockholders, leaving \$1,400,000 of that issue, with a large amount of other securities to be applied to the floating debt.

I. CAPITAL STOCK.

The whole capital stock, before the late subscription to the second mortgage bonds, was—

Common stock.....69,544 shares.
Guaranteed do.....30,632 "
100,176 shares.

Surrendered for bonds:—
Common stock.....9,712 shares.
Guaranteed do.....1,700 "
11,412 "

Leaving the whole issue:—
Common stock.....59,832 shares.
Guaranteed do.....28,932 "
88,764 "

Equal to.....\$8,876,400

In addition to this amount of capital stock proper, there have been heretofore issued 526 shares of stock, called on the books "Collateral Stock," which were used as collateral to debts. If any part of this should be sold in the market on non-payment of the debts, it will be so much to be added to the capital stock above stated.

II. FUNDED DEBT.

Bonds of— Due.
Michigan Southern Co. 1860.....\$993,000
Northern Indiana Co.1861.....985,000
Erie and Kalamazoo Co.1862.....300,000
Michigan Southern Co. (plain).....1863.....282,000
Northern Indiana Co.1863.....307,000
Jackson Branch.....1865.....218,000
Goshen Line.....1868.....1,361,000
Consolidated Co. (sinking fund).....1885.....2,434,000
Second general mortgage.....1877.....1,600,000

\$8,480,000

Less purchased and retired by commissioners of sinking fund.....178,000

Total, by Michigan Southern and Northern Indiana Co.\$8,302,000
Bonds of Detroit, Monroe and Toledo Company, 1876.....291,000

Total.....\$8,593,000

III. FLOATING DEBT.

In the early part of the year 1857, the floating debt of the Company was represented at about.....\$2,440,000
To meet this, in part, an issue of guaranteed stock was made, which produced.....1,531,600

Leaving the floating debt, as represented.....\$948,400

The committee appointed by the last Board, in their report to the stockholders at the meeting at Adrian, September 25th, 1857, stated the floating debt, at that time, as appeared and was ascertained from the books of the Company, to be \$1,799,868 05. After the present Board came into office, a review of the floating debt was had, and, according to the materials then at hand, it appeared to be \$1,982,000.

Of this floating debt, about \$766,214 35 was found to be secured by hypothecation of the stock and bonds of this Company, and of the Detroit, Monroe and Toledo Railroad Company, and other securities, amounting in the aggregate of securities, to \$2,594,300.

\$500,000 of the issue of the \$1,600,000 eight per cent. bonds were also pledged, and the bonds of the Company were mortgaged, as collateral security for endorers and acceptors on the paper of the Company.

A part of this floating debt was paid off in November and December last; so that the unpaid balance, on the 31st of December, including \$72,377 38 for unpaid dividends and interest upon bonds appeared to be...\$1,990,913 20

From which should be deducted—
Cash in hands of cashier.....\$26,558 63
Amounts due from agents on

current accounts, estimated	
good by the cashier.....	97,700 13
	124,258 76
Making balance, January 1, 1858.....	\$1,866,684 44
Deduct the balance of cash received by the agent of stockholders, for late subscription to bonds.....	324,515 63
Balance of floating debt.....	\$1,542,168 81

The Company held assets of various kinds, being stocks and bonds of this and other companies, and debts due from individuals and corporations, to the nominal amount of \$1,978,107 15.

The residue of the 2d mortgage bonds, \$1,400,000 are held as applicable to the floating debt. The well-known circumstances of the Company and of financial affairs in general at the time of, and prior to the organization of the new Board caused great difficulty in raising money on a new loan. Although the amount raised was insufficient to pay off the debt secured by hypothecation of securities, the Treasurer has arranged a release of \$940,000, and it is hoped that ultimately the whole will be saved.

The residue are offered for sale. The report says:

It is hoped that by this means, and the use of other securities from time to time redeemed, the whole of this debt may be cancelled at no distant day. It cannot be doubted that these bonds are amply secured by the mortgage upon the property of the company. This consists of 447 miles of road and its equipment; and the lien of the prior mortgages is only \$6,700,000, or say \$15,000 per mile of road only, with the additional security of equipment, amounting to \$1,607,000. The directors see no other means of payment.

The report of May, 1857, stated that the directors had guaranteed the payment of \$300,000 of the seven per cent. first mortgage bonds of the Cincinnati, Peru and Chicago Railroad Company which intersects our road at Laporte, being 30 miles long. This was done in October, 1855. That company paid the interest up to September, 1857, when, having failed, this company paid it, and \$4,900 is still unpaid to us. Another instalment of interest fell due March 1st, and the company has declined to pay the coupons, a large share of which has been presented. If the company is bound by this guaranty, this forms a contingent liability, not included in our estimates of debt.

In treating of the liabilities of the Company, it is proper to state that the last Board of Directors, as appeared by their report of September 16th, 1857, made an issue of eight per cent. bonds, to the amount of \$1,600,000, payable in 1867, secured by the pledge of bonds, debts and other miscellaneous assets, then belonging to the company, placed in the hands of trustees. None of these bonds have been sold; but some of them were used by the late Board as collateral for other obligations of the company. It is the purpose of the present Board not to sell any of these bonds, or farther to hypothecate them; and they have given instructions to retire them as soon as means can be provided for the purpose.

Various reforms have been introduced into the transportation department of the road. Arrangements have been made with the Michigan Central Company by which a ruinous competition has been stopped. The number of employees has been reduced from 3,249 to 1,651 on the 15th of January.

Through the action of the Board and the committee, the compensation of officers and men have been reduced, in most cases from 20 to 25 per cent.

The amount of pay rolls for Oct. 1857, was.....	\$95,160 92
" " " Nov. ".....	61,140 27
" " " Dec. ".....	58,405 00

BUSINESS OF THE YEAR.

The gross earnings for the year from all sources were as follows, viz.:

Earnings from through passengers.....	\$848,805 35
Earnings from way passengers..	467,672 86
	\$1,316,478 21
Earnings from mails and express on passenger trains.....	73,446 52
Total on passenger trains.....	\$1,389,924 73
Earnings from through freight....	\$297,041 47
Earnings from way freight.....	506,720 89
	803,762 36
	\$2,193,687 09
Add received for storage, &c.....	\$34,291 44
From steamboat business.....	81,508 77
	115,800 21
Total earnings from all sources....	\$2,309,487 30

EXPENSES.

Operating expenses of road, as per schedule B, annexed.....	\$1,581,393 12
Less surplus of materials on hand over amount Jan. 1, 1857.....	4,937 33
	\$1,576,455 79
Operating expenses of steamers	\$112,875 80
Treasurer's Department—Expenses of New York offices, directors, &c.....	75,844 52
	\$188,720 32
Total expenses.....	\$1,765,176 11
Thus it appears that the total amount of earnings of all kinds being.....	\$2,309,487 30
And the total expenses.....	1,765,176 11
The net earnings for the year are.....	\$544,311 19

Which gives per centage of expenses to earnings.. 76
If the rent of the Erie and Kalamazoo road be included, the per centage is..... 77½
If the steamboat expenses and the rent of the Erie and Kalamazoo road are excluded, the per centage is..... 74
The earnings per mile for freight and passengers, are..... \$1 56
The expenses per mile for freight and passengers, are..... 1 16
The Board regret that the business is so unsatisfactory, but believe that with the reforms introduced, the operating expenses may be kept at 55 per cent. of gross earnings.
The road generally is in good condition, as is also the rolling stock and motive power.

The rolling stock consists of 90 locomotives, 80 first-class and 59 second-class passenger and baggage cars, and 1,275 freight and gravel cars of various kinds, making a total of 1,414 cars.

The principal office is at Toledo—and it is contemplated, as soon as practicable to close the office at New York, except for transfers of stock.

Accompanying the Directors' Report is that of Mr. JOHN B. JERVIS, the late Chief Engineer, giving the items and particulars connected with the construction [account and matters coming under that department.

AGGREGATE COST FOR CONSTRUCTION AND ROLLING STOCK.

Of the several lines—including the apportionment of the several amounts for iron rails, rolling stock, amounts not classified, &c., as specified in the preceding statement—is as follows:

Names of Lines.	Length in miles.	Amounts.
Michigan Southern and Northern Indiana Railroad—Monroe to Chicago and to Constantine, Old Goshen, (10 miles), and Baileytown branches.....	274	\$5,315,923 94
St. Joseph & Valley Railroad—Constantine to Three Rivers.....	8	77,853 47
Jackson branch—Lenawee junction, to Jackson.....	42	\$35,561 84
Goshen line—Goshen & Toledo junction.....	120	2,851,653 95
Toledo section and station—Toledo to junction.....	3	890,699 13
Goshen line extension—Toledo junction to the State line of Michigan.....	7	144,034 66
Aggregates.....	454	10,115,731 99
Erie and Kalamazoo Railroad—Toledo junction to Adrian.....	30	253,736 43
Totals.....	484	\$10,369,468 33

The Treasurer's report is not given.

EXTENT OF LIABILITY OF RAILROADS.

O'Brien v. The Philadelphia, Wilmington and Baltimore Railway.

This was an action to recover damages for injuries to the person and property of the plaintiff, by a collision with a locomotive of defendants. The accident occurred at the crossing of a public highway, on which the plaintiff was driving his cart, and the railroad of the defendants.

Mr. F. C. Brewster, for plaintiff, presented the following points:

1. That the defendants are bound, while running a locomotive over the public highway of a city, to use every precaution necessary for the safety of the property and lives of the citizens.

2. That this duty is specially obligatory upon approaching and turning corners of public highways in a city.

3. That amongst other matters of precaution, the speed of the engine should be so regulated and controlled, at the intersection of public streets in a public city, that the train can be stopped if necessary for the protection of the property or lives of those going along the public highway.

4. That it is incumbent on the defendants in such circumstances to give warning of their approach.

5. That the ordinance of Moyamensing prohibiting a greater rate of speed than 12 miles per hour, does not authorize the defendants to go at that rate around curves and at intersections of public highways, if that speed is dangerous to the public.

6. That the care required of the plaintiff is, that degree of care which may reasonably be expected from a person in the plaintiff's situation.

7. That if there was negligence on the part

both of the plaintiff and of the defendants, and the plaintiff, by the exercise of ordinary care could have avoided the injury, and he did not exercise such care and thereby contributed in any degree to the injury, he could not recover; but, that if the plaintiff could not by the exercise of ordinary care, have avoided the injury, the want of such care on his part would not preclude him from recovery.

Messrs. St. George T. Campbell and I. Hazlehurst, for the defendants, requested the Judge to instruct the jury as follows:

1. That there is no evidence, that the plaintiff was placed in the Pennsylvania Hospital, by the defendants or their agents and therefore, in estimating the damages, if any are recoverable, the jury cannot include any injury or suffering of the plaintiff, caused by any disease there contracted.

2. That there is no evidence that the injury to the eyes of the plaintiff, was caused by, connected with, or consequent upon, any act of the defendant, and the jury cannot include any injury or suffering of the plaintiff in respect thereto, in their estimate of damages, if any are recoverable.

3. That even if the jury believe, that the servants of the defendants were guilty of carelessness, yet if the plaintiff was also himself negligent, he cannot recover.

4. That if the plaintiff could have avoided the collision, by the exercise of common prudence or ordinary care, he cannot recover.

5. That whenever the relative position and levels of a railway and cross-road will permit, it is the duty and common prudence and ordinary care required of every person having control of a vehicle about to cross the track, to look up and down the railway, before passing upon or over it.

6. That when the position and grades of a cross-road and railway track are such, that the person controlling a vehicle about to cross the latter, can see an approaching train a sufficient distance to enable him to stop his vehicle before reaching the track, it is his duty and he is required, in the exercise of ordinary care and common prudence, that he should look along the line of the railway in both directions, and himself stop to prevent a collision, and if he omits to do so, he can recover no damages for any consequences that may result to him therefrom.

7. That the placing of the locomotive and gravel train upon the southern of the double tracks, owned by the defendants, below the crossing, at which the plaintiff was injured, was a lawful use thereof by them, and that the position thereof does not in any respect affect the duties and obligations of any person about to cross such double track road, but that the same remain as stated in the fifth and sixth points, and the fact that the attention of any person about to cross such tracks, is attracted to such locomotive, whether standing on the adjoining track or in motion, will not excuse him from the obligation to stop, to look in both directions or to listen before attempting to pass over such double track.

CHARGE OF THE COURT.

WOODWARD, J.—This is an action in which the plaintiff claims damages for an injury inflicted upon his person and property, by the servants of the defendants. It is in proof that at the time of the occurrence complained of, both parties were prosecuting their ordinary and lawful occupations on these intersecting highways. Both had the right to pursue these highways, but this right was to be

so exercised by each as not to hurt the other; and the roads were capable of being so used. They were designed, both of them, to promote the public convenience and welfare, and if they can not co-exist harmlessly, they have failed of the object of their institution, and one or the other should be abated as a common nuisance.

The plaintiff invited to travel the open street, and the company authorized by law to run their cars on their road, could not injure each other if both were careful: if neither was regardless of the social duty which he owed the other.

The fact of collision, then, proves negligence in some body. It may be the negligence of the company, the negligence of the plaintiff, or the mutual negligence of both parties. The jury are to determine from all the evidence, where the negligence attaches.

The plaintiff can recover only for the negligence of the company. If his injury was attributable, in any degree, to negligence on his own part, he is not entitled to damages. Though the company's agents may have been in fault, and in greatest fault, yet if the plaintiff contributed by his own carelessness, to his injury, the law will not adjust the balance of blame between them, nor award damages to either, for the result of their compound negligence. Every man is bound to take reasonable care of himself, and when he seeks redress for personal injuries, he must show that he has done so.

This term *negligence*, which we use so much, must be clearly defined to the jury. It is sometimes defined as the want of ordinary care, a definition which stands in as much need of definition as the thing itself. Negligence may be described as the want of that care which men of common sense and common prudence ordinarily exercise in like employments. You are to have regard to the business in which O'Brien and the Railroad Company were engaged when the accident occurred, and to ask yourselves which of them omitted that degree of care which men of ordinary prudence exercise when engaged in similar employments.

First, as to the defendants; the jury will consider whether the train was conducted as a prudent man would have conducted it in the suburbs of a great city. Is notice usually given of the progress and approach of trains where railroads run through densely populated districts, and cross numerous streets? Did the defendants ring and whistle? Was their speed reasonable, all things considered? These are questions for the jury. As to the signals, the evidence is conflicting. The engineer, the conductor, a passenger, and one or two other witnesses, swear that the bell was rung from the time they left the depot, and the engineer says the whistle was sounded when the peril of the plaintiff was discovered, and before the collision took place. Several witnesses produced by the plaintiff testify that they either live in the neighborhood or happened to be there at the time, and that they heard neither bell nor whistle.

Generally, affirmative evidence is more reliable than negative. Signals which people are accustomed to hear, are often disregarded when actually given, and it is more probable that these witnesses are mistaken who say they did not hear the bell, than it is that the engineer is mistaken whose business it was to ring it. Yet it is argued, with what force the jury will say, that the engineer, whose duty it was to ring, and who generally did so, must be understood as speaking of his belief,

founded in his general practice, rather than of his recollection of what he did on a particular day, so long past as November, 1854.

A similar discrepancy exists in the evidence as to whether an omnibus intercepted the plaintiff's view up the road. His witnesses locate the omnibus between him and the approaching train, whilst the witnesses on the part of the defence, deny that there was any omnibus there. Now the driver of the omnibus, and the passenger who was in it, are more likely to be correct about its location than others, who, though situated so they might have seen it, had their attention directed to other objects, and failed to notice it. As to the speed of the train, the evidence proves that it was less than twelve miles an hour, which is the rate allowed by the ordinance of the district of Moyamensing, and it is argued that this is decisive on this point. I do not think so. The rate limited by the ordinance is to be considered, but the question of negligence does not depend on municipal ordinances, but on the general experience and observation of the jury, regard being had to all the circumstances of the case. The velocity of the train may have been within the ordinance, and yet in the actual condition of facts, unreasonable and imprudent. In other circumstances, a speed beyond the rate of the ordinance, might not be deemed reckless. The jury are not to disregard the rate legalized by the ordinance, but they are to decide, in view of all the circumstances, whether the train was conducted with such speed, and such signals as prudent men ordinarily employ in such places. If they find that it was, there is an end of the case, for in that manner the law allows the company to use their road. And an injury that results from a lawful and prudent exercise of their rights must be referred to the negligence of some other party, and can not subject them to damages.

But if the jury find that the company were not faultless, that they did or omitted any thing that would constitute negligence as I have defined it, the next inquiry will relate to the conduct of the plaintiff.

He was a carter, and the same general principles apply to him as to the defendants. He was bound to pursue his business with all that regard to the safety of himself and others which prudent men commonly employ in like occupations. Did he demean himself in that manner? In answer to the 6th and 7th points on the part of the defendants I instruct the jury that a carter, or any man having charge of a team, who is about to cross a railroad at grade on which locomotives run, is bound to stop and listen, and look in both directions, before he permits his team to set foot within the rails, and omission to do so is negligence on his part. This rule of law is demanded by a due regard to the safety of life and property, both his own and that which is passing on the railroad. From the diagram in evidence it is perfectly apparent that the plaintiff could have seen the approaching train if he had looked. If he saw it, it was extreme rashness in him to allow his lead horse to advance so far, and if he did not see it, it must have been because he did not look.

I state the general rule, but whether it is applicable to the plaintiff in the circumstances which surrounded him is for the jury. A few yards on his right, some witnesses think seventy, there was a gravel train, with a locomotive attached, standing on one of the tracks, and liable to start at any moment, and on his

left, according to his witnesses, was the omnibus in close proximity to the crossing.

Now, for these circumstances the plaintiff was in nowise responsible, and the question is, whether, they constituted any excuse for his not looking up the road. Had he listened he could not have heard the bell or whistle, for as we are now contemplating the case it must be presumed they were not sounded. I have already instructed the jury that if they believe these signals were given, and the speed was reasonable, the plaintiff was bound to take notice of them. If the jury so find they will not reach this part of the case, but if they find the signals were not given, and are thus brought to the consideration of the plaintiff's conduct, he must be regarded as subject to the general rule—bound to look as well as listen, unless the circumstance to which I have adverted were sufficient in the judgement of the jury to excuse him. It is argued that the gravel train was on its appropriate track and lawfully standing where it was. Doubtless. But if the Company so engaged the plaintiff's attention to the gravel train as to divert it from the approaching passenger train, can they allege that his failure to see the latter was negligence in him? I refer this question to the jury. If the jury see nothing in this circumstance to excuse the plaintiff for not looking out for the passenger train coming at its customary time, then there was negligence on the part of the plaintiff, and he cannot recover even if there was negligence on the part of the Company. If, however, they think the general rule of law was not applicable to him in his peculiar situation, then the failure of the engineer to give the accustomed signals was negligence for which the company would be responsible and the plaintiff is entitled to have his damages assessed. The only remaining subject to which I may address a few words is the measure of the damages.

The damages, if any, should be merely compensatory and not vindictive. The plaintiff was carried to the hospital to have his broken leg cured, and there it is said he contracted ophthalmia, by reason of which he lost the sight of one eye altogether, the other being also much impaired. It is shown that there was no such disease in the hospital, and the plaintiff has failed to show that the injury of his eyes was a consequence of the collision on the railroad. Damages are not therefore to be given him on account of his eyes, but for the horse that was killed, for the loss of his time and the expenses attending the cure of his fractured limb, he is entitled to recover, if under the evidence, and on the principles of law that have been explained, the jury consider him entitled to their verdict.

The Judge then proceeded to notice the special points submitted by counsel on each side, and declined to charge as requested in the first three points on the part of the plaintiff but repeated the principles of law as contained in the foregoing charge.

The 4th, 5th and 6th points of the plaintiff, and the first part of the 7th point were affirmed, but instead of the latter part of the 7th point the jury were referred to the charge.

The defendant's points were all affirmed except the 7th, which was answered with a modification as in the charge.

Whereupon the counsel for both plaintiff and defendants excepted before verdict, and prayed that the charge be filed, which is done.

This jury rendered a verdict for defendants. *Legal Intelligencer.*

ILLINOIS CENTRAL RAILROAD.

The following are the Directors of this road, as elected on March 17:

Thomas E. Walker, J. N. Perkins, and Gustavus W. Smith, to hold until March, 1862; Pierre Chouteau, jr., until March, 1861.

The Detroit Tribune of Monday evening, says: "We are informed that the stock of a railroad, from Detroit to Port Huron, was all subscribed on Saturday last, and the right of way is being secured to-day, for the first ten miles from this city. The managers of the Grand Trunk of Canada have taken hold of it, which will secure an early completion. The road is necessary as a proper connection for the Grand Trunk Railroad, which will accordingly have its western terminus at Detroit."

BUREAU VALLEY RAILROAD.—This Company is offering \$100,000 seven per cent. first mortgage bonds, payable 1st of August, 1858, principal and interest payable in New York, the bonds being convertible into the stock of the Company. The Chicago and Rock Island Road has a perpetual lease of the B. V. R. R., at an annual rent of \$125,000. The financial condition of the Company is as follows:

Eight per cent. non-convertible Bonds....	\$300,000
Seven per cent. Convertible Bonds.....	300,000
Capital Stock, 9,500 shares.....	250,000
Total.....	\$1,550,000

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Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. House Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

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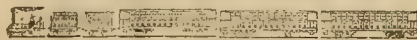
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ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

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NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

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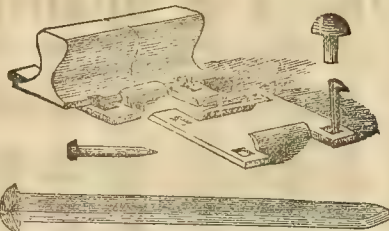
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Cincinnati, Jan. 31, 1855. [Jan-1y] Agent.

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July 14, 1857.

ly23-1m

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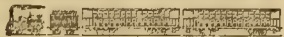
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feb5-ly

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858.

For the Grubbing, Grading, Masonry, Bridging and Cross Ties for the First Division of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK,

Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.

March 18—21.

IRON BOILER FLUES
PASCAL IRON WORKS.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 85 South Third St.,

PHILADELPHIA.

[206]

RAILROAD IRON.

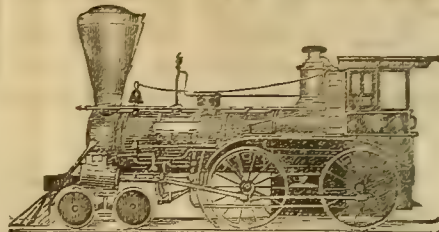
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 35 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

J. H. GOODMAN & CO.,

no. 7 Wall st., N.

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEADLININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an Iron Forgings of almost every description, etc., etc., at the OLD STAND,

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Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES.

Of the late firm of Bridges & Bro

JOEL C. LANE

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MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.

These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floors, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 60 feet span, 8,000 lbs. weight, \$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2600 lbs. weight, \$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 52 squares, \$1200, or \$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES,

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc.; and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

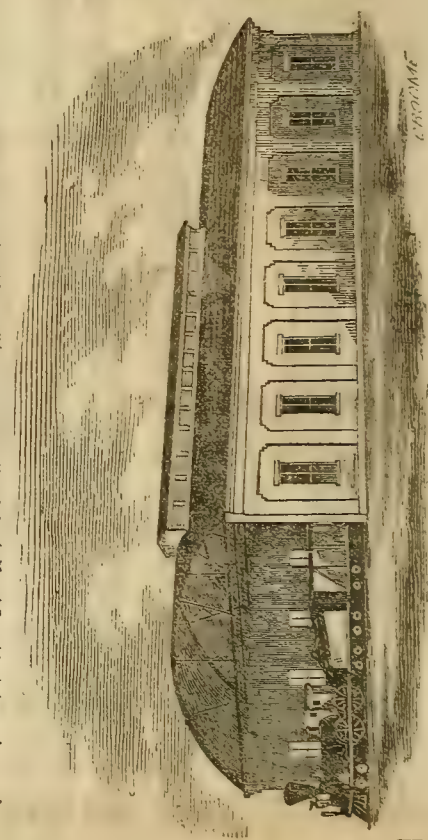
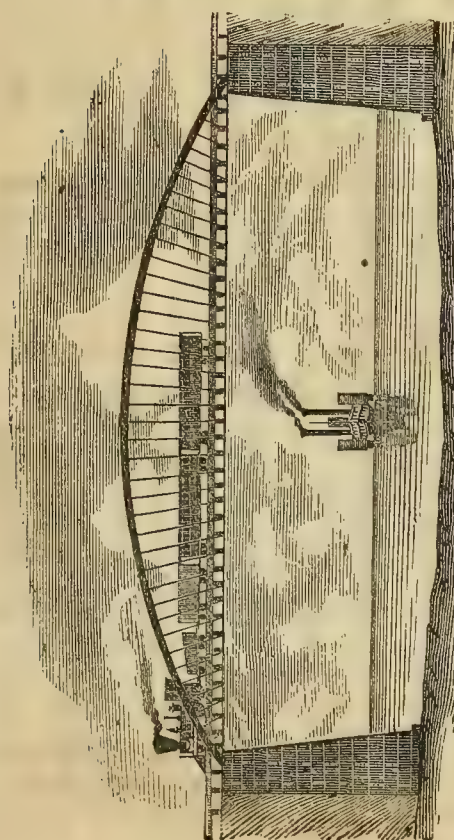
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 66 West 3rd Street, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 16, 1858.—6m.



Most Direct Route to the East.

BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA AND NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FREIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

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Master of Transportation, Baltimore.

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Julio Office, Adams Express Co., Third street.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,

ap10 Sup't Terre Haute & Richmond R. R.

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PATENT PORTABLE CIRCULAR SAW MILLS.

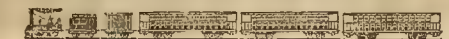
THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

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LEE & LEAVITT.

1857. November 30. 1857.

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EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield. This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

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And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

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H. B. RUGGLES, Conductor.

TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

Freight.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

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Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

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Office No. 2 Burnet House.

Jan2

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

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1857. Summer Arrangement. 1857

Cincinnati, Hamilton & Dayton [TRUNK LINE.]



RAILROAD,

FOR THE NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPOUT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at City for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect—at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sapper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

“STEAMER BAY CITY,”

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS** Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

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Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH Agent

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No. 5 FRONT STREET

Opposite Public Landing,
Cincinnati, O.**PORTER, ROFFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."**

We have now in operation, at Pomeroys Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook-head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for sale. Also, a full assortment of the Pomeroys Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chains filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.**POOLE & HUNT,**

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2**ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,**

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST),
112, Main Street, Cincinnati**J. T. CRAPSEY,
ATTORNEY AT LAW,**

OFFICE:

N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI**SCHENECTADY
Locomotive Works,**

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

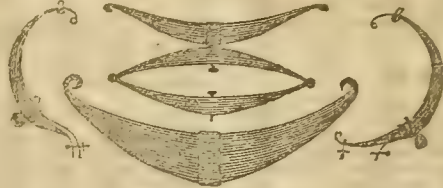
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Au16.1y

**McDANIEL & HORNER,
LOCO- AND CAR
MOTIVE SPRING****MANUFACTURERS, WILMINGTON, DEL.**

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge. References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

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May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

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MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE,
WITH OR WITHOUT AXLES.**WHEELS FITTED**

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad

MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

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TRICKS AND TRAPS OF NEW YORK CITY. Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents—All sent free by mail. DINSMORE & CO., dec10 9 Spruce street, New York

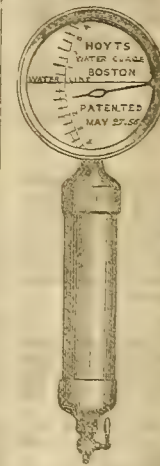
HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
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Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, C.

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, APRIL 15, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

ADVERTISEMENTS—

One square, single insertion	\$1 00
“ “ per month	3 00
“ “ six months	12 00
“ “ per annum	20 00
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Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors,

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The following is the statement for March, 1858, of the business of the Illinois Central Railroad:

LAND DEPARTMENT.

Acres construction lands sold.....	5,851.32 for..	\$72,660 73
Acres interest lands sold.....	594.18 for..	9,988 00
Acres free lands sold.....	1,199.56 for..	15,473 34

Total sales during the month.....	7,644.06 for..	\$97,819 07
To which add town lot sales.....		520 85

Total of all.....\$98,339 92

Acres sold since Jan. 1, 1858.....	14,948.09 for	\$193,116 61
Acres sold previously.....	1,200,933.78 for	15,311,440 40

Total.....1,215,881.87 for \$15,504,556 91

Const'n Bonds canceled in March, '58.....	\$ 20,000
Const'n Bonds canceled previously.....	535,000

\$605,000

Free'd Bonds canceled in March, '58.....	1,000
Free'd Bonds canceled previously.....	69,000

70,000

Total Bonds canceled up to April 1, 1858.....\$675,000

TRAFFIC DEPARTMENT.

Receipts from passengers.....	\$63,975 28
Receipts from freight.....	73,505 57
Receipts from mails.....	4,686 90
Receipts from rent of road.....	2,856 81
Receipts from other sources.....	2,301 03

Total receipts in March, 1858.....\$153,325 58

Total receipts in March, 1857.....174,353 07

Total receipts since January 1, 1858.....	\$393,852 91
Total receipts in corresponding period, 1857.....	451,148 68

VOL. 6.—No. 8

STATISTICS OF RAILROADS.

The statistics of Railroads are, like the statistics of other important things, the sole basis of correct information, or legislation. They are more important to the railroad companies than even to the public. In view of this fact, the Legislature of Ohio has put in the Act relating to the Statistics of the State, a section requiring all railroad companies to answer such questions as the Commissioner of Statistics may ask. As this law is of interest to the railroad companies, we shall insert the entire section which concerns them. The third section of the Act, in relation to statistics, reads thus:

"SECTION 3. That the corporate officers of the several Railroad Companies incorporated by the laws of this State, are required to answer such questions as may be asked by the Commissioner of Statistics in relation to the condition of their roads,—the accidents which have occurred on them, the number of casualties, the number of passengers, and the amount of freight carried, and the quantity of fuel consumed."

The "condition" of the roads, of course, includes their operations, cost and expenses. If this information be obtained, it will show the precise results of each road, and enable both the public and stockholders to have the most complete information on the whole subject.

The Commissioner of Statistics intends to frame the questions, so that they shall give the least possible trouble to the companies, while they answer the object of the law.

The information sought in the answers will be referred, in time, to the 1st of July, 1858; so that a uniform period may be covered, and one in which most companies are accustomed to make up their accounts.

The questions to which the companies should turn their attention, are as follows:

1. The number of miles run by all trains, and the average cost of running trains.

2. The number of passengers carried, and the average distance and average cost of each one.

3. The number and kind of casualties which have occurred on the road.

4. The quantity and kind of freight carried, and the average distance, and average cost per ton.

5. The number of Locomotives, and the average amount of fuel for each, and in aggregate.

As these questions are important to the roads themselves, and the result of general experience will be valuable to them, they will find it to their interest in giving an early attention to this subject. The reports of some companies give much of this information, but not all; and many of the companies pay no attention to statistics.

In his Report, the Commissioner of Statis-

tics states the aggregate cost and debt of the railroads of Ohio, as follows:

Cost.....	\$95,000,000
Debt.....	55,000,000

Probably this is much too low for the cost on the books; but, it is very near the actual cost. After a very careful examination of the indebtedness of several companies, it appears that the cost of brokerage, or in other words, the discounts and commissions on loans have been from 10 to 20 per cent.; in the aggregate, nearer 20. In some cases from 30 to 40 per cent. have been lost in discounts, and, consequently, the rate of interest varied to nearly double the nominal rate. We may safely state, that the aggregate nominal cost of railroads in Ohio has been \$110,000,000, and that nearly \$20,000,000 of this has been lost in brokerage! The manner in which this has been distributed would be very curious, if we should ever get at it. But, that is impossible. It will remain among the mysteries of a broker's profession. Something like \$40,000,000 has been actually paid on railroads in Ohio, by its own citizens. No money was ever expended more profitably for the people of the State. It may not have been properly distributed, in regard to those who reap the most benefits; but, in regard to the community, it has been immensely profitable. Hence are 20,000 square miles of land within five miles of the railroads of Ohio, and it is within bounds to say, that each acre of that land is worth \$10 more than it was, before these roads were made. Two hundred millions of dollars is the minimum of the value, added to the property of Ohio by railroads!

In regard to the Stockholders, it will be their own fault if they do not reap profits. It is a great mistake to say Railroad Stock is worthless, because roads must run two or three years, and get in order, and make up their accounts before they can divide a dividend. There is a railroad in Ohio which divided 26 per cent. last year; another 12; another 10, and others have made large sums which they expended on the road. There are not more than three or four railroads in Ohio, which will not eventually be profitable. To make them so, however, there are three things necessary:

1. To settle up all accounts, and fix a period when the construction account is closed.

2. Then reduce all stock and debts, that is the Book Cost, to its actual cost; so that interest and dividend shall run on the real amount of money invested.

3. That the road be run for the least expense.

Now, to determine the last, or, indeed, any part of these questions accurately, there must be accurate statistics; and that, not of one road merely, but of roads; for the experience of roads, like that of individuals, is various.

The experience of one company may be of great service to another.

These statistical inquiries may greatly aid the companies when they come to be aggregated; and in turn, the companies can aid the Commissioner, by making their own inquiries and referring them to the 1st of July, 1858, when the whole may be answered and aggregates, ready for general tabulation.

In some of the States a separate Commissioner or Bureau has been created to inquire into statistics; but this is unnecessary where there is a Commissioner of Statistics, and the companies are willing to co-operate with him.

RAILROAD CAR FINDINGS.

We give below a communication from a firm well known to our railroad readers for a long course of honorable and successful dealings in the above business. Recent changes in their firm have presented an opportunity for a contemptible effort on the part of some poor spirited individual to secure, by misrepresentation, a portion of the business which their enterprise and integrity has secured for them. Our readers will know how much or how little confidence to place in one who takes advantage of a name to profit by the reputation of others.

TO THE PUBLISHERS OF THE R. R. RECORD:

A circular has been handed us issued by S. B. Bowles, of this city, which, we learn, has been extensively circulated. One which contains such false statements, evidently designed for our injury, that it requires an unqualified denial from us. The language of the circular is as follows:

"George E. Bridges, for the past five years of the house of Bridges & Bro., of this city, has the pleasure of informing his friends and railroad managers generally, that he has associated himself with S. B. Bowles, to whom he would solicit a continuance of the patronage so liberally bestowed upon the late firm of Bridges & Bro.," &c., &c.

The George E. Bridges referred to in the circular, was *never one of the house or firm of Bridges & Bro.*, but was in their employ for several years as clerk or salesman. The late firm of Bridges & Bro., consisted only of Albert Bridges, the present senior partner in the firm of A. Bridges & Co., and Alfred Bridges, who may be found at the old stand of B. & B.

Honorable enterprise and truthful statements to secure business, are always worthy of support and commendation, but when individuals resort to duplicity and untruth, to alienate from others a business which has been secured by years of patient industry, justice to our many friends and to ourselves, requires a public statement of facts.

Respectfully yours, &c.,

A. BRIDGES & Co.,
64 Courtland St.

New York, April 12, 1858.

We can not close this little notice without saying to our readers, that we have known the firm of Bridges & Bro. and their successors, A. Bridges & Co. for many years, and known them to be prompt, energetic, and honorable men. And their customers may rely, with implicit confidence, upon their integrity and promptness.

(Correspondence of Railroad Record.)

THE IRON STEAMSHIP "VOYAGEUR DE LA MER."

American mechanics generally excel in the construction of wooden vessels, and the remark is equally true, whether by this term we be understood to mean heavy freighting or line of battle ships, light and fast clippers, or high pressure steamers for shallow rivers. It is unfortunate that our first attempt at constructing a large iron ship should result in a failure, but such seems to have been the case with the ship recently constructed in Boston for the Egyptian Government. And it is somewhat remarkable that the failure should be due not to any fault in the hull, and thus be attributable to a want of familiarity with the material, but to defects in the boilers and engines, parts of which our countrymen are generally as proud as of the models of the vessels. The "Voyageur De La Mer" should have been able to run between ten and fifteen miles per hour, but on her several trial trips it has been reported that the best speed made under steam alone was only about three. The model is excellent, and when under sail, with a fair wind, her canvass aided by the steam, has moved her some eight or ten miles per hour without disturbing the water sensibly. The faults must lie, it has been concluded, in the boilers, the engines, or the propelling screw. Engineers have been discussing the matter for over three months past, and the ship has been lying idle at her dock for a much long time, a splendidly constructed and elegantly furnished, but useless frigate.

Since the commencement of this month a contract has been closed to introduce extensive alterations. The boilers are to be enlarged by the addition of steam chimneys or steam drums on their tops, so that less water will be mingled with the steam, and the engines, which are two large low pressure oscillators, will be rendered what are termed "Corliss" engines. The machinery will be built by the Corliss Steam Engine Co., at Providence, and sent by railroad, the ship remaining at Boston until completed.

There are several small iron steamers working very successfully in this country, and it is particularly desirable that this ship should be provided with successful machinery in order that her failure, if one, should be due to the novelty in her hull alone. An immense number of iron vessels, mostly screw steamers, have been built in Great Britain, where metal and labor is cheaper, and wood is dearer, than in this country, but the "Voyageur De La Mer" is understood to be materially different from any,—a kind of an experimental ship which, if ultimately successful, may give this country a chance to compete with Britain on nearly equal terms. She is a double ship, complete hull of wood contained within a stout shell of iron. It is

found that the splinters of iron are particularly fatal when an iron warship is struck by a cannon ball, and the wooden interior is designed to serve the double purpose of strengthening the structure and stopping the iron fragments when in action. The ship, as newly fitted, will probably be ready for her trial trip next June. S.

(Correspondence of Railroad Record.)

LITTLE ROCK AND FORT SMITH RAILROAD.

DARDANELLE MOUNTAIN, ARK.,
April 1st, 1858. }

MESSRS. EDITORS:—The railroads of Arkansas are now beginning to claim that position and attention among railroad men and capitalists, which their importance demands. Hitherto, the *unmerited* desperado and bowie-knife reputation, early financial misfortunes, or doubted agricultural and mineral productiveness, has kept the railroad interest of our State in the back ground. Eastern and northern railroad men have looked on at a distance, folded their hands, perhaps pitied and condemned the bad policy of the State, but have never offered to help us. It is only now when our good old Uncle Sam has made us a magnificent present of land, and public opinion has pointed out a great national highway through our midst, to the Pacific, that we are beginning to be noticed abroad.

But outsiders know very little yet of what we are, or what we are doing. The Fort Smith Branch of the Cairo and Fulton Railroad has been already commenced. Col. Shoemaker is in the field with a corps of competent Engineers, and the first ten miles of the road will be in running order by the beginning of December next.

The United States Land grant to aid in the construction of the Cairo and Fulton Railroad and its branches, of which this road is one, provides that *one hundred and twenty sections of land may be sold, before any part of the road is built.* In other words, the Company have a right to sell, or otherwise dispose of, this quantity of land to obtain means to build the first ten miles of the road; then a like quantity of land may be sold to build another ten miles, and so on, until the road is completed.

The estimated cost for the construction and equipment of the road—based upon the calculations of competent surveyors—will be about \$17,000 per mile. The land—4000 acres per mile—at the low estimate of five dollars per acre, will bring \$20,000, giving a clear profit of \$3,000 per mile when the road is fully paid for.

Has any railroad ever been projected under fairer auspices, or been built with greater ease than this promises?

It is needless to say any thing here about the value of the lands above this estimate. Coal, iron and lead crop out in abundance over almost every section; so that eminent

geologists have not hesitated to place Arkansas second in the Union in point of mineral resources.

What, then, is to prevent Arkansas from having railroads? And what is to prevent some of the overflowing means of Eastern monied men finding a safe and profitable return for their surplus capital, from her railroad projects? In time we will see.

For this road we have no fears. Col. Shoemaker embodies the elements of success. His long experience upon some of the Eastern roads, and his indomitable energy in putting this road in process of construction, have gained him the entire confidence of the people of the State. Yours,

FACTOTUM.

Railroads.

NORTH-EASTERN RAILROAD COMPANY.

To the Stockholders of the N. E. R. R. Co.:

GENTLEMEN:—I have the honor to submit the following report "of the condition and affairs of the Company."

The road was completed on the third day of October last, and on the fifth day of the same month, the first train ran over the entire road from Charleston to Florence.

The statement of C. Williman, Jr., Esq., Treasurer, marked A, herewith submitted, exhibits the receipts and expenditures during the fiscal year ending 28th February. From this it will be seen that the following are the receipts:

From Bonds given for part payment of real estate.....	\$ 39,910 00
From Instalments on Stocks.....	872,242 87
From sale of Bonds.....	482 000 00
From Notes to Banks etc.....	425,837 34
From balance of Transportation.....	34,197 19
From Sundry Open Accounts.....	22,460 29
Due to Contractors—In Cash.....	\$ 6,215 21
In Bonds.....	10,632 01
In Stock.....	23,963 52
	40,810 74

\$1,917,458 43

The Expenditures for the Road, Real Estate, Equipment.....	\$1,907,277 87
Leaving in Notes secured by Collaterals, Stock in the Cheraw and Darlington Railroad Company, and Cash; a balance of.....	10,180 56
	\$1,917,458 43

It thus appears that the cost of the Road Equipment and Real Estate purchased for the use of the Company, amounts to one million nine hundred and seven thousand two hundred and seventy-seven 87-100 dollars.

In this sum it must be remembered is included all interest, discount on bonds, salaries, right of way and expenses of every kind from the formation of the Company to the 28th February, 1858.

To complete the necessary turn-outs, depots, station houses, wharf accommodations, and work shops, a further expenditure will be necessary.

The number of shares subscribed for and taken by contractors for labor and material furnished, is as follows:

The City of Charleston.....	8000 shares.....	\$400,000
The State of South Carolina.....	4400 shares.....	220,000
The Banks in Charleston.....	1600 shares.....	80,000
Individuals.....	3733 shares.....	186,650

17,733 shares.....\$856,650

Of which subscription all has been paid, excepting of

the individual subscription, the sum of.....	\$14,407 13
And as but a small portion of this can ever be realized, it may be as well to consider it as lost, and we have as a total subscription.....	\$872,242 87
To which is to be added for contractors, not yet settled with, as per Treasurer's statement.....	23,963 52

Total amount of stock.....	\$896,246 39
The indebtedness of the Company is.....	\$987,054 85
as follows, viz:	
On bonds secured by mortgage of road and properties.....	\$482,000 00
On Bonds for real estate, secured by mortgage of property purchased.....	39,910 00
On bills payable.....	425,837 34
On sundry, open accounts.....	22,460 29
On bonds and cash due contractors.....	16,847 22
	\$987,054 85

Considering as a debt the stock as above....\$896,246 39
We have the amount as a total.....\$1,833,261 34
Representing this amount as assets, the Company hold the following property:

1. The Road itself, 102 miles in length, estimated at \$16 000 per mile, value.....	\$1,632,000 00
2. Equipment—	
10 Locomotives, cost \$82,174, value....	73,000 00
34 Box and 40 Platform Cars.....	33,700 00
7 Passenger Coaches.....	15,000 00
2 Second Class Coaches.....	2,000 00
3. Stationary Engines, Tools and Materials in Shops.....	3,500 00
	\$1,761,200 00

4. Real Estate, consisting of—	
1. Depot in Charleston, with 44 acres of land, cost \$90,000, value.....	\$925,000 00
2. 577 acres land at Florence, cost \$5,776, value.....	20,000 00
3. 28 acres land at Seven-mile House, cost \$1,600, val.....	1,600 00
4. 11 acres land at the Fork of King and Meeting street road, cost \$7641, value....	10,000 00
5. A lot of land on Blake and Columbia sts., cost.....	2,000 00
	\$268,600 00
5. Slaves—3 men and 1 woman.....	4,900 00
6. Stock in Cheraw and Darlington Railroad Co.....	7,257 51
7. Notes secured by collaterals.....	895 62
8. Cash.....	2,027 43
	14,180 56

The receipts from transportation during the past year amounts to.....\$99,403 55
Expenditures on account of transportation.... 61,132 01

According to this exhibit, it would appear as if an unusual amount had been expended in this department. But it must be borne in mind that, during seven months of the year, a very large portion of our transportation expenses was incurred in constructing the road. The transportation of passengers and freight was performed by the same locomotives and employees that transported materials for construction—the same trains carrying freight, mail, passengers and materials—consequently, it is utterly impossible to show properly what is strictly chargeable to transportation proper, and what to construction account. We have, therefore, preferred to charge the whole amount to this department.

In order that you may the more satisfactorily understand the results of the active operations of the road up to the latest date, we may add that, from the first of October last to the 31st of March, 1858, (six months,) the total earnings of the road—

Amount to.....	\$93,921 61
Or a monthly average of.....	15,653 60
The expenses during the same time.....	43,362 27
Or a monthly average of.....	7,227 04
The interest on the indebtedness of the Company for the same time, say.....	35,000 00
Or a monthly average of.....	5,833 33
Adding the interest as a current expense, we have the monthly average expense.....	13,060 37
Which, deducted from the average monthly receipts, leaves a monthly gain of.....	2,593 23

On this result the stockholders have every reason to congratulate themselves, as it is

* This sum represents the actual cost of the road and all the Company's property at first March, 1858. If to this sum we add the amount received from transportation as above, \$34,197 19, and deduct the balance of \$10,180 56, we have \$1,907,277 87, as before stated.

very rare that Railroad Companies, at their beginning, earn sufficient to pay their expenses and the interest on their debt.

Such a result is most encouraging, seeing that your road was completed and commenced its working existence at a period of unexampled depression in every department of trade and industry—that a very large, the largest portion, of the country through which it passes, is entirely undeveloped and very sparsely populated.

If the North-eastern Railroad could, in the midst of such a crisis as that through which the whole commercial world has just passed, earn sufficient to pay interest and expenses, what is to be expected when times are ordinarily favorable, and when the resources of the country are fairly developed.

Already villages are springing up on the line of the road, and the wealth of the pine forests, heretofore locked up for want of facilities to reach a market, is about to find its way to the seaboard. Our up way freights give promise of a largely increasing down freight, as no inconsiderable portion of the material carried over the road consists of guano and other manures to improve the soil and increase the products of the country tributary to our road.

The energetic manner in which those in charge of the Charleston and Savannah Railroad are now pushing that work to completion—the rapid progress of the Savannah, Albany and Gulf Railroad, which ere long shall reach the Gulf counties of Florida, show that at no distant day Charleston must resume her position on the great thoroughfare of the Atlantic and Gulf States.

Arrangements are now in progress to put a line of first class steamers between Charleston and Fernandina, Fla., and the railway from that point to Cedar Keys is now more than half finished. In the course of next winter, that road will be completed, and with the steamers from Charleston to Fernandina, and from Cedar Keys to Mobile, New Orleans, Galveston, Vera Cruz, Tehuantepec, Honduras, Nicaragua, Panama and Havana—passengers from the north for all of these different ports and countries, together with the California travelers, shall find their shortest route over our road to their respective destinations.

This is no idle or visionary scheme, but one which has already the approval of the Post Office Department, and the earnest co-operation of all the railroad companies from Charleston to New York.

The extension of the line of roads through the coal fields of North Carolina to Raleigh, may be looked upon as a "manifest destiny." And the prospect of a national foundry at the coal and iron deposits of Deep River, gives promise of a new Sheffield or Birmingham, to which, by means of the North-Eastern Railroad, Charleston is to be the Liverpool.

In short, every thing augurs well for the business of the road; and were the entire debt of the Company funded upon reasonable terms, there is no doubt that dividends can be paid to the stockholders at an early day.

As matters now stand, the floating debt of the Company is very large, and the experience of all railroads prove that their floating debt has been the greatest drawback to their prosperity.

As before stated, the entire debt amounts to \$987,054 85
Of this there is already funded....\$482,000 00
Leaving as a floating debt..... 505,054 85

Of the Company's first Mortgage Bonds,

450 remain unsold, but are held by the various banking institutions as collateral security.

A sale of these bonds, at a fair valuation, ought to yield sufficient to reduce the floating debt.....\$202,500 00
Leaving still unfunded, say in round numbers..... 700,000 00

In order to fund this portion of our debt, I would recommend to the stockholders the issue of three hundred thousand dollars of stock on which a dividend at the rate of eight per centum per annum should be guaranteed.

The experience of the Central Railroad and Banking Company, of Georgia, shows that such an issue is not only practicable, but that its results have been advantageous. No clearer statement can be made than the letter of R. R. Cuyler, Esq., President of that Company, and the certificate which it enclosed.

CENTRAL R. R. AND BANKING CO.,
Savannah, March 29, 1858.

Allan McFarlan, Esq., President, Charleston:
DEAR SIR,—This Company did issue guaranteed 8 per cent. stock to the amount, in all, of \$800,000. I enclose you a bank certificate which will explain the terms.

Parties have, hitherto, merged this guaranteed stock into general stock of the Company, and now the guaranteed stock stands at less than seventy thousand dollars. No doubt every dollar will be merged. We pay 10 per cent. per annum on our general stock, with every prospect of continuing our rate. The late "panic" threw the stock down to 102 for 100 paid. I have just seen a sale of 80 shares at 106½ cash.

It may be to your interest, at the end of 10 years, to pay up the certificates, and as the stock, under the enclosed form, will be taken just as readily as in any other shape, I advise you to adopt our plan.

Very truly and respectfully yours,
R. R. CUYLER, President.

If this plan is adopted, and the stock sold at par, the condition of the Company would be nearly as follows:

Debt on first Mortgage Bonds \$700,000; annual interest.....	\$49,000 00
Stock and guaranteed Dividends \$300,000; annual dividends.....	24,000 00

Making the annual amount to provide for... Or the semi-annual amount.....	\$73,000 00 36,500 00
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That this amount can be easily provided for from the earnings of the road is placed beyond a doubt by the result of the first six months, as before shown.

To recapitulate:

Earnings from Oct. 1 to April 1.....	\$93,921 61
Expenses from Oct. 1 to April 1.....	43,362 27

Net earnings.....	\$50,559 34
Interest and Dividends as above.....	36,500 00

Surplus.....	\$14,059 34
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For a detailed statement of the condition of the road, rolling stock and property, I beg to refer to the report of S. S. Solomons, Esq., Engineer and General Superintendent, in whose recommendations I heartily concur.

In concluding this report, it affords me great pleasure to bear testimony to the laborious zeal of the officers and employees of the Company, during the past year—a year, the hardships and trials of which can alone be fully estimated by those whose patience and endurance have, like theirs, been so severely tested.

To the Board of Directors and to the Stockholders, the President desires to express his gratitude for their kind confidence and co-operation, and begs to deliver over to them

his charge, with the full assurance that it shall be committed to much more competent hands.

Respectfully submitted,
ALLAN MACFARLAN, President.
April 6, 1858.

Statement of the Affairs of the North-eastern Railroad Company on the 28th February, 1858.

EXPENDITURES.	
For Construction.....	\$891,604 14
Iron.....	535,446 53
Expenses, Salaries, etc.....	60,349 21
Real Estate, Depot, Wharf, etc.....	103,072 84
Right of Way.....	45,350 46
Property, Machinery, etc., consisting of Locomotives, Cars, Negroes, etc.....	151,105 20
Discount and Charges on Sales of Bonds..	47,353 07
Interest.....	72,996 42
	\$1,907,277 87

On hand—	
Notes secured by Collaterals...\$	895 62
Stock in Cheraw & Darlington Railroad Company.....	7,317 51
Cash.....	2,027 73
	10,180 56
	\$1,917,458 43

RECEIPTS.	
From Bonds given by the Company in part payment for Real Estate.....	\$ 39,910 00
Installments on Stock.....	872,242 87
Sale of 950 First and 14 Second Mortgage Bonds.....	482,000 00
Notes to Banks, etc.....	425,837 34
Gross Transportation from 1st March, 1857, to 1st March, 1858.....	\$95,329 20
Less Expenses on same.....	61,132 01
	34,197 19
Sundry Open Accounts.....	22,460 29
Due to Contractors—	
In Cash.....	\$ 6,215 21
In Bonds.....	10,632 01
In Stock.....	23,963 52
	46,810 74
	\$1,917,458 43

Errors excepted.
C. WILLIMAN, JR., Treasurer.
Charleston, March 1, 1858.

MINNESOTA AND ITS RAILROAD LOAN.

The following is the official act passed by the Legislature of Minnesota, granting aid to the railroads:

THE \$5,000,000 LOAN BILL, AS AMENDED AND PASSED BY THE LEGISLATURE.

An Act Proposing an Amendment to Sec. 10, Art. 9, of the Constitution, and Providing for the Submission of the same to the People.

Be it enacted by the Legislature of the State of Minnesota:

SECTION 1. The following amendment to the Constitution of this State is hereby proposed for publication, and approval or rejection by the people, in accordance with Sec. 1 of Article 14, of the Constitution; that is to say, that Section 10 of Article 9, of the Constitution shall be as follows:

SEC. 10. The credit of this State shall never be given or loaned in aid of any individual, association or corporation, except that for the purpose of expediting the construction of the lines of Railroads, in aid of which, the Congress of the United States has granted lands to the Territory of Minnesota, the Governor shall cause to be issued and delivered to each of the companies in which said grants are vested by the Legislative Assembly of Minnesota, the special bonds of the State, bearing an interest of seven per cent. per annum, payable semi-annually in the city of New York, as a loan of public credit to an amount not exceeding twelve hundred and fifty thousand dollars; or an aggregate amount to all of said companies, not exceeding five millions of dollars in the manner following, to wit:

Whenever either of the said companies

produce to the Governor, satisfactory evidence, verified by the affidavits of the Chief Engineer, Treasurer, and two Directors of said Company, that any ten miles of the road of said company has been actually constructed and completed ready for placing the superstructure thereon; the Governor shall cause to be issued and delivered to such Company bonds to the amount of one hundred thousand dollars, and whenever thereafter and as often as either of said Companies shall produce to the Governor, like evidence of a further construction of ten miles of its road as aforesaid, then the Governor shall cause to be issued to such Company, further like bonds to the amount of one hundred thousand dollars for each and every ten miles of road thus constructed, and whenever such Company shall furnish like evidence that any ten miles of its road is actually completed and cars running thereon, the Governor shall cause to be issued to such company like bonds to the amount of \$100,000; and whenever thereafter, and as often as either of said companies shall produce to the Governor, like evidence that any further ten miles of said road is in operation as aforesaid, the Governor shall cause to be issued to such Company, further like bonds to the amount of one hundred thousand dollars, until the full amount of the bonds hereby authorized shall be issued: *Provided*, That two-fifths and no more of all bonds issued to the Southern Minnesota Railroad Company shall be expended in the construction and equipment of the line of road from LaCrescent to the point of junction with the Transit road, as provided by law; *And further Provided*, That the Minneapolis and Cedar Valley Railroad Company shall commence the construction of their road at Faribault and Minneapolis, and shall grade an equal number of miles from each of said places.

The said bonds thus issued shall be denominated "Minnesota State Railroad Bonds," and the faith and credit of this State are hereby pledged for the payment of the interest and the redemption of the principal thereof. They shall be signed by the Governor, countersigned and registered by the Treasurer, sealed with the seal of the State, of denominations not exceeding one thousand dollars, payable to the order of the Company to whom issued, transferable by the endorsement of the President of the said Company, and redeemable at any time after ten and before the expiration of twenty-five years from the date thereof. Within thirty days after the Governor shall proclaim that the people have voted for a loan of State credit to Railroads, any of said companies proposing to avail themselves of the loan herein provided for, and to accept the conditions of the same, shall notify the Governor thereof, and shall, within sixty days, commence the construction of their roads, and shall within two years thereafter construct ready for the superstructure, at least fifty (50) miles of their road.

Each company shall make provision for the punctual payment and redemption of all bonds issued and delivered, as aforesaid, to said company, and for the punctual payment of the interest which shall accrue thereon, in such manner as to exonerate the Treasury of this State from any advances of money for that purpose; and as security therefor, the Governor shall demand and receive from each of said companies, before any of said bonds are issued, an instrument pledging the net profits of its road, for the payment of said interest and a conveyance to the State of the

first two hundred and forty sections of land, free from prior incumbrances, which such company is or may be authorized to sell, in trust for the better security of the Treasury of the State from loss on said bonds; which said deed of trust shall authorize the Governor and Secretary of State to make conveyances of title to all or any of such lands to purchasers agreeing with the respective Railroad Companies therefor: *Provided*, That before releasing the interest of the State to such lands, such sale shall be approved by the Governor, but the proceeds of all such sales shall be applied to the payment of interest, accruing upon the bonds in case of default of the payment of the same, and as a sinking fund to meet any future default in the payment of interest and the principal thereof when due; and as further security, an amount of first mortgage bonds, on the roads, lands, and franchises, of the respective companies, corresponding to the State bonds issued, shall be transferred to the Treasury of the State at the time of the issue of State bonds, and in case either of said Companies shall make default in payment of either the interest or principal of the bonds, issued to said Companies by the Governor, no more State bonds shall thereafter be issued to said company, and the Governor shall proceed in such manner as may be prescribed by law to sell the bonds of the defaulting company or companies, of the lands held in trust as above, or may require a foreclosure of the mortgage executed to secure the same: *Provided*, That if any company so in default, before the day of sale, shall pay all interest and principal then due, and all expenses incurred by the State, no sale shall take place, and the right of such company shall not be impaired to a further loan of State credit:

Provided, If any of said companies shall, at any time, offer to pay the principal, together with the interest that may then be due, upon any of the Minnesota State Railroad Bonds, which may have been issued under the provisions of this section, then, the Treasurer of State shall receive the same; and the liabilities of said company or companies in respect to said bonds shall cease upon such payment, into the State Treasury, of principal together with the interest as aforesaid.

Provided further, That, in consideration of the loan of State credit herein provided, that the company or companies which may accept the bonds of the State in the manner herein specified shall, as a condition thereof, each complete not less than fifty miles of its road on or before the expiration of the year 1861, and not less than one hundred miles before the year 1864, and complete four-fifths of the entire length of its road before the year 1866, and any failure on the part of any such company to complete the number of miles of its road or roads in the manner and within the several times herein prescribed, shall forfeit to the State all the rights, title and interest of any kind whatsoever in and to any lands together with the franchises connected with the same not pertaining or applicable to the portion of the road by them constructed, and a fee simple to which has not accrued to either of said companies by reason of such construction, which was granted to the company or companies, thus failing to comply with the provisions hereof by act of the Legislature of the Territory of Minnesota, vesting said land in said companies respectively.

SEC. 2. The foregoing amendment shall be submitted to the electors of the State, at

an election to be held on the 15th day of April, one thousand eight hundred and fifty-eight, in the several elective districts of this State. The ballots at such election shall be written or printed as follows: Those in favor of the amendment, "Loan of State Credit for Railroads—Yes." Those against the amendment, "Loan of State Credit for Railroads—No." The polls at said election shall be opened between the hours of eight and ten o'clock, A. M., and closed at six o'clock, P. M., and the said election shall be conducted, and the returns thereof made and certified, in the manner provided by law for returning votes for Territorial delegate to Congress, except that the said returns shall be addressed to the Governor, by whom the same shall be canvassed within twenty days after said election; and if it shall appear that a majority of voters present and voting at said election have ratified the proposed amendment, the Governor shall incorporate the foregoing amendment in the Constitution, and shall make proclamation of the result, and deposit the election returns in the office of the Secretary of State.

SEC. 3. Besides the publication prescribed by existing laws, this Act is hereby directed to be published in all the newspapers of this State, for which publication the same rate of compensation is hereby fixed as for similar insertions in the official paper of the Legislature.

SEC. 4. This Act shall take effect from and after its passage.

GEORGE BRADLEY,
Speaker, pro tem., of the H. of R.

RICHARD G. MURPHY,
President, pro tem., of the Senate.

Approved, March 9, 1858.

CHAS. L. CHASE, *Acting Governor.*

SECRETARY'S OFFICE, Minnesota, }
March 9, 1858. }

I hereby certify the foregoing to be a true copy of the original on file in this office.

CHAS. L. CHASE, *Secretary.*

THE SECURITIES REQUIRED BY THE STATE FROM THE COMPANIES.

The securities required by the State in making this loan, are thus explained by the *St. Paul Advertiser*:

The securities held by the State against any payment by the Treasury are four-fold in their nature.

1. *By a failure to provide the accruing payments of interests, a Company forfeits the right to receive any further installment of State bonds.*

This provision has not been sufficiently considered in the progress of the discussion. It became of value when the principle was adopted, that no State aid should be given until there was a definite amount of actual construction. Under this rule the issue of bonds is a guaranty of work done—when the limit of their issue is reached, there is two hundred and forty-eight miles of railroad as its equivalent. Of course, this will take time; but if a Company fails to meet a single semi-annual payment of interest, the issue of bonds immediately stops. The matter regulates itself every six months. Interest paid, the Company may continue to receive bonds—interest unpaid, the authority to issue instantly ceases. At the outset, therefore, if not a year or two hence, there is much virtue in this clause; and we know of many objectors, who have no fears except for the first pay-

ments of interest. When the roads get fairly started they say, all apprehensions may be dismissed. These first payments of interest, as well as the funds requisite to construct the first ten miles ready for the superstructure, will probably be furnished from subscriptions to capital stock, which will, of course, increase under the new impulse.

2. *The net profits of the roads will become an important item of security for the payment of interest on State bonds.*

We are aware that the opponents of the measure are accustomed to sneer at the pledge of net profits to the State; but all experience in Iowa and Missouri, show that the first twenty-five miles of road extending west of the Mississippi river, is invariably profitable. This pledge of net profits will become available, therefore, long before each company will receive the total amount of State bonds issued; and when the whole sixty-two miles are in operation, who can doubt that the first care of the stockholder will be to provide for the interest on State bonds; as, otherwise, there would be no chance for dividends. Such a pledge of net profits was the only security reserved by Missouri for the payment of interest by the Hannibal and St. Joseph Road on a loan of two millions, but it was sufficient; and if found so even before a company begins construction, (as in the instance just cited), certainly the assurance grows doubly sure, as construction is pushed forward. At present the Hannibal and St. Joseph road is operated seventy-five miles, and the transportation exceeds the most sanguine calculations of its projectors. A pledge of its net profits would now be recognized as ample security for three times the original loan of State credit; nor is there a Minnesota Land Grant Road but will exhibit as favorable a state of things, with the same amount of construction into the interior.

3. *THE SINKING FUND FOR THE REDEMPTION OF THE PRINCIPAL OF THE STATE BONDS IS AMPLE.*

This will be derived from two hundred and forty sections, or 153,600 acres of land which each company is required to convey to the State, according to the plain tenor of section four of the Land Grant Act of Congress, the right to sell one hundred and twenty sections is given in advance of construction, and "another quantity of one hundred and twenty sections may be sold when twenty continuous miles are completed;" but it has been insisted that forty miles must be completed before the right to sell two hundred and forty sections is vested. In any event, each company conveys in trust the "first two hundred and forty sections which it is or may be authorized to sell;" and the proceeds of these lands are to be sacredly applied as a sinking fund for the principal. If the company thus parting with the title and the right to convey in favor of the State, shall agree with parties for the sale of any of these lands, the Governor may approve of such sales, and in connection with the Secretary of State, may execute deeds to the purchasers, but all proceeds of such sales go into the Treasury, and must there remain as a sinking fund for principal, or to meet any default of interest. It is also provided, that if a Company fails to meet interest, the Government may sell the lands so held in trust, of course at any price, to protect the Treasury; but the evident intention is, that as long as the companies pay regularly, they may help the State to advantageous sales for the purpose of making the

most of the above provisions to meet the State bonds at maturity.

But for such a purpose, and sold with a regard to the interest of the State, what amount 153,000 acres bring? The lands of the Illinois Central Railroad Co., hitherto sold, have averaged \$12 50 per acre. Even at \$10 per acre, the proceeds of the above conveyance in trust will be \$1,530,000. These lands can not fail to furnish a sufficient provision for retiring the State bonds long before their maturity.

4. FIRST MORTGAGE BONDS ON THE ROADS, LANDS AND FRANCHISES OF THE RESPECTIVE COMPANIES, CORRESPONDING TO THE STATE BONDS ISSUED.

These are to be transferred to the Treasurer of the State at the time of any issue of State bonds, as "further security," not only for every accruing payment of interest, but for the final redemption of principal. The bonds have this advantage; that they can be made available on any sudden emergency; and the Governor is directed to sell them, in such manner as may be prescribed by law, to prevent a default in the payment of interest. The Legislature, as recommended by the select committee of the House of Representatives, will prescribe the manner in which such sale of railroad securities shall take place. It would be well, say three months before the day for a payment of interest, for the Governor to require from each Company by a day certain that funds should be deposited to meet such payment, on a failure to comply with this notice, then the Railroad bonds should be immediately advertised for sale, and every step taken to provide the requisite amount of money in advance of the day of semi-annual payment. The section clearly authorizes such a procedure, and in this way, no possible discredit can fall upon the State Treasury.

We notice in some quarters a misapprehension of the subject of First Mortgage Bonds, which we think it desirable to remove. Fears seem to be entertained that the Companies will make excessive issues of First Mortgage Bonds. But why should they incur this discredit? Why authorize ten millions, with a prospect of sale at fifty cents on the dollar, when par can be had for five millions? But, in fact, the officers of a road have little discretion in the matter. Capitalists determine this essential point for a railroad Company, upon a jealous scrutiny of the prospects and resources of the enterprise. It has become an universal usage, especially with Land Grant Roads, to execute, in advance of any issue of bonds, a deed of trust, covering the road, lands and franchises, and in which all particulars deemed necessary for the security of future bondholders, are carefully stipulated. Three trustees are usually named, who enjoy the confidence of the financial public, and no point is more carefully guarded than the limit of the issue of bonds. At this time there is no prospect that our Minnesota Companies will be allowed to issue more than half the amount which would have been yielded to them one year ago. Whatever the limit which will keep the value of these Land Grant bonds nearly at par, that will be fixed in the deed; nor would any intelligent railroad director wish such a limit to be exceeded. At any rate, the companies can not help themselves in this particular, and the State will have the full benefit of the jealousy and vigilance of the capitalists at this very critical juncture. For one, we are willing to accept the risk, that the First Mortgage Land

Grant Bonds of the respective Companies, authorized by a deed of trust executed under such circumstances, will prove a satisfactory security to the State. It is a far better security than an exclusive lien upon any section, even of fifty miles of completed road; while all experience shows that no financial arrangement so cripples the energies of a railroad, as a series of incumbrances upon sections of a continuous line. The Legislature has shown its practical wisdom in declining to insert all provisions of this nature.

We should be gratified to believe—nor does it seem improbable—that with the consummation of this measure, capitalists will come forward, and besides taking the State bonds at par, will advance an equal amount upon the first mortgage bonds of the Companies, after limiting their total issues as above stated. They certainly will not do so, until by the terms of deeds of trust, it is made certain that the bonds thus negotiated will be as valuable as we desire those held by the State to be made. With such an arrangement, ten millions of European and Eastern capital, instead of five, may be permanently invested in our great leading thoroughfares within a short period. Indeed, there is abundant evidence that when the people of Minnesota show to the world that we not only have confidence in the future of the State and the permanent value of our internal improvements; but that in a crisis like the present, the government will interfere actively in behalf of these enterprises—we shall be met more than half way by parties seeking investments for the accumulated capital of both worlds. Hence, we deem it fortunate, that the Legislature has been satisfied with abundant securities from the companies, and have not sought unnecessarily to restrain their energies in going beyond what the State requires as the results of the loan of credit.

In the foregoing review of the nature of the securities held by the people of Minnesota, against the contingency of taxation, we have purposely excluded from view the personal guaranties, which are afforded by the interests and honor of our citizens who are connected with these companies. Even thus considered we are prepared to assert our entire satisfaction with the safeguards established by the section as it stands. Indeed, when we look abroad and compare the securities which have proved ample in other States to protect their Treasuries from any advance on account of a loan of State credit for railroads, we agree with the intelligent Editor of the Cincinnati *Railroad Record*, E. D. Mansfield, Esq., who observed of this Minnesota measure, that the securities were at least *twice as great* as had been exacted by any other State making a similar loan of State credit.

ILLINOIS CENTRAL RAILROAD IMPROVEMENTS FOR 1857.

The Illinois Central Railroad Company have made extensive improvements in their arrangements at and near the City of Chicago during the past year, and have now facilities for doing a much larger business with dispatch than at any former period. Upon the river front, north of their freight depot, the plan for widening the river suggested by Col. Graham, and adopted by the city, has been carried out, and has made a wonderful change for the better both in the Company's grounds and the capacity of the harbor. The Company have thus obtained additional dockage to the extent of 220 feet on the river, while in

connection with this work a new dock has been built in their west basin, 620 feet long and 30 feet wide, with a track extending from the freight yard along its entire length. This was done principally with a view to facilitate the transhipment of lumber from vessels into the cars. It is estimated that double last year's amount of lumber can now be handled with ease. Both the basins have been dredged to an average depth of 14 feet. Over 20,000 cubic yards of material have been removed from them, and the largest vessels upon the lakes can now lie at the docks with safety.

Much progress has been made towards filling up the space inside of the breakwater, immediately south of the Government pier, 56,000 cubic yards of material having been deposited therein during the year. In the Chicago freight yard 6740 feet of new track have been laid, about 1,000 feet of new siding upon the St. Charles Air Line, and the depot ground otherwise enlarged and improved, affording greatly increased accommodations for business.

We have before and often referred to the splendid warehouse of the capacity of 700,000 bushels, erected during the past year by Messrs. Sturgess & Buckingham, giving them now two of the finest warehouses in the city admirably well located for the transaction of a heavy business.

During the fall and winter of 1856, the breakwater built by the company to protect their track along the Lake shore, suffered very severely from the violent storms, and in some parts was totally destroyed. Nearly all of it has been more or less repaired, and over 1,700 feet entirely rebuilt. A new breakwater 312 feet in length has been constructed across the angle in the old structure at the foot of Randolph street, to protect the new tracks which were carried into the freight yard on piles, outside of the old breakwater.

Near the Round House, and on the Lake Shore, south of the American Car Works, there have been built 4,434 feet of pile protection, by driving 6,257 piles averaging 30 feet in length, in two rows six feet apart, and filling the space between them with stone, of which 4,000 cords were used during the past year. South of the Round House a number of piers, having an aggregate length of nearly 500 feet, have been built out into the lake, experience showing that accretions of sand upon the north side are the invariable result of such structures.

The total length of breakwater now constructed is 23,324 feet extending from the Chicago River nearly $4\frac{1}{2}$ miles south along the Lake Shore. It may be said with truth that the Company's works at and near this city were never in a better condition than at the present time. To one who remembers the condition of things upon the lake front six years ago, and the position of the shore line at that time, the change is great indeed. And when it is further brought to mind that the Illinois Central Company have done all this at an expense of about a million and a half of dollars, certainly none can deny that this corporation deserves well of Chicago and the State of Illinois.

The receipts of the Lake Erie and Wabash Road for March, were:

Passengers.....	\$18,677 98
Freight.....	37,246 65
Miscellaneous.....	3,200 00

Total.....\$59,124 61
against \$35,400 in February.

SONORA EXPLORING AND MINING CO.

SECOND ANNUAL REPORT.

We are indebted to the President of this Company, Major S. P. Heintzelman, for a copy of the Second Annual Report of the Company. It is one of much interest, and shows the results which are sure to follow enterprise and perseverance in a great object.

At the date of the last Annual Report, the officers announced to the company the gratifying and important intelligence of the purchase of the Arivaca Rancho, containing four leagues (17,700 acres) of land, including permanent water, wood, grass, and arable land sufficient, when under proper cultivation, to supply the wants of a large mining force, and having besides, within its boundaries, some twenty-five old mines, worked in former times by its Mexican owners. The title papers to this valuable estate have been examined by the Attorney of the Company, Hon. Thos. Corwin, and have been pronounced perfect. The boundaries are the same as were established in 1802, by the father of the gentleman from whom the company made the purchase. The title to the Rancho of Arivaca is probably the most perfect of all the titles now existing in Arizona. Indeed, the number of good Mexican titles in this whole territory is reduced to some four or five, of which the officers of the company at Tubac have perfect transcripts, and some of which they hold the right to purchase.

In obtaining the Arivaca Rancho, the Sonora Exploring and Mining Company has obtained the most desirable of all these estates. This fact is amply confirmed by all the military and scientific gentlemen who have visited this territory. It has more mineral wealth, as well as agricultural resources, than any other estate of equal area in this territory, and perhaps in the whole world.

Besides the Arivaca Rancho, the Company owned, at the date of the last Report, twenty-four veins of Silver ore in the Santa Rita Mountains, including the Salero and Ojero Mines, which were famous for the richness of their ores in the days of the old Spanish Miners. According to the traditions of the Mexican inhabitants, the ores of the Salero yielded from 6 to 12 marcos of Silver to the carga, amounting to from \$51 to \$162 to the 300 lbs. of ore. This would be equivalent to \$340 to \$680 per ton. The assays made by the engineers of the Company, and at the United States Mint, show an average of \$1,400 per ton. At the date of the last Report the Engineers were engaged in cleaning out the Salero, and had progressed to the depth of sixty feet. Work was continued on this mine till the progress of the miners was interrupted by water at the depth of eighty feet from the surface. When it was deemed advisable to suspend operations on this vein, till the arrival of suitable machinery for pumping out the water, by a less laborious and tedious process than the Mexican method of carrying it up on men's shoulders. From the smallness of the pile of rubbish at the mouth of the mine, the engineers were led to conclude that they had nearly reached the bottom of the old shaft, and that they would soon strike the good ore. Considerable work has been done on other shafts to prove the value of the ores, but none of them have been carried to the paying point, owing to the want of furnaces to smelt the ore when raised. Sufficient, however, has been done to show that the Santa Rita veins are regular veins of the Sulphurets of Silver and Copper, containing small quantities of Gold. Mineral Coal is said to exist in the neighborhood of these mines, and traces of Cinnabar have been found.

In addition to the Arivaca Rancho and the Santa Rita Mines, the engineers of the Company have pushed explorations into the Cerro Colorado Mountains, and acquired title to twenty-nine veins of Silver ore of extraordinary richness. The first one of these which was opened, was named the "Heintzelman Mine," in honor of the President of the Company. A map of this district, drawn by Mr. Ehrenberg, the Company's Surveyor, shows twenty-one distinct veins opened by the Company, within an area of one-and-a-half miles in length by one mile in breadth. The main effort, however, has been expended on the "Heintzelman Mine." This has been carried to the depth of fifty feet, and galleries started. The ore already raised is estimated by the engineers to be worth \$100,000.

On the San Coyetano Mountains the Company have opened two veins of Silver ore, and have built houses for the accommodation of miners, should it be deemed desirable to commence immediate development.

The Company have therefore at the present time eighty distinct veins of Silver ore, and it is probable that many more will yet be discovered on its present possessions. The resources of the Arivaca Rancho have never yet been fully de-

veloped, and there is every reason to believe that the coming year will show that estate to be worth at least double what its value is now estimated to be. A site for a smelting Hacienda has been selected on this Rancho, convenient to a good supply of wood and water, and of easy access from the mines. Preparations for building have been actively prosecuted. Bricks have been made and materials for fire-bricks for the furnaces sought. The brick-work for three furnaces is up, and they are only waiting for the iron-work to complete them.

The head-quarters of the Company were located at Tubac, an old Mexican town, garrisoned by them till the cession of the territory to the United States. Suitable buildings have been erected for the accommodation of the various departments of its business, and protection of its employees in case of attack by the Indians.

The Company will, therefore, see that its agents at the Mines have diligently prosecuted its business and accomplished great results with the means placed at their command.

At the present moment, from careful comparative assays made in San Francisco and at the Mines, the engineers have determined to erect amalgamating as well as smelting works. The machinery has been constructed in San Francisco, and is expected to be erected and in operation at the Mines by the middle of May. The amalgamation works will be capable of reducing from 125 to 150 lbs. of Silver per day, equal to from \$2,500 to \$3,000 per day. As there is a large quantity of ore already on the ground, and as the miners are still at work, it is expected that no delays will occur from that source, to prevent the early realization of the above hopes.

Amid the present brilliant prospects of the Company, it may not be amiss to recur to some of the difficulties with which their agents have had to contend during the past year. The operations of the Company were commenced, and have been carried on in a country destitute of population, and infested with hostile Apaches. Aside from the troops under Major Steen, at Fort Buchanan, your own agents have been the most considerable body of American citizens in the whole territory, with the exception of the residents of Tucson.

The arrival of United States troops at Fort Buchanan has not relieved the Company from the necessity of self-protection. Your agents have depended mainly upon their own resources for protection from the attacks of the Indians. Thus far they have sustained themselves nobly, and it is altogether probable that they will hereafter have no serious difficulty in defending our possessions. They are well armed and self-reliant.

The nearest port to which vessels ply in the United States territory, is Fort Yuma, at the junction of the Gila and Colorado rivers, and distant from Tubac about 200 miles. All the supplies have had to be hauled in wagons from this point to the mines, and each train had to be accompanied by an armed escort. This, joined to the unsettled condition of the country, has rendered the procuring of supplies a matter of no small difficulty. The more natural channel in which these things should come, is from the towns and villages of Mexico immediately to the south of the boundary line, and distant from Tubac only some fifty miles. The agents of the Company had turned their attention in this direction, and were beginning to receive regular supplies from this source, and on more favorable terms than at Fort Yuma, when this channel was temporarily closed by the organization of a party of filibusters designing to join Col. Crabbe.

Feeling that this expedition of our citizens against a neighboring country with which our government was at peace, and for which there was not even a shadow of pretext, was unlawful and piratical, and could only result in the destruction of the marauders, representations to this effect were made to Major Steen, with the request that he should interpose his authority to stop the unlawful measure and save the effusion of blood. These representations were disregarded, and our party were punished for their bold advocacy of the right, by the robbery of some of their animals and the ill treatment of two of their number, who were intercepted on their way to Tubutama for men and supplies.

To these outrages Major Steen paid no attention, and they were followed by the natural result, the total destruction of the whole party of filibusters by the Mexicans. The bold and manly position of our company on this important question, placed in such striking contrast with the inefficiency of the officers of the government, became known among the Mexicans, and its ultimate effect has been to strengthen our influence in this country. Our party was, however, temporarily, seriously inconvenienced by the loss of its regular supplies. In this emergency, recourse was had to the Pimos

Villages, not very far distant, and a supply of grain was obtained there.

The Company has reason to congratulate itself on the selection of the Managing Agent, and his staff of engineers. Their integrity, ability and zeal for its success under the most discouraging circumstances, is worthy the highest commendation that the Company can give.

The officers of the Company are able to announce that there is a movement on foot in Washington, which will probably result in the erection of this country into a distinct territory, under the name of Arizona. If this is not accomplished, it is altogether probable that it will at least be constituted a separate judicial district. In either event, the strong arm of the civil law will be extended over the country, and property and life be rendered more secure.

At the date of the last annual report, the Company had not the means of erecting its permanent smelting works, and looked to the sale of stock to procure them. Owing to the length of time necessarily consumed in transporting specimens of the ore from the mines to Cincinnati, and the impossibility of commanding public confidence without such evidence of the value of our property, the disposition of the stock proceeded but slowly, and it was not till the beginning of July that the Company was able to show such evidence as would convince the world of the undoubted, richness of its mines. In the meanwhile, fearing that something might occur to render the employment of more money than the company actually possessed absolutely necessary, the President and Secretary of the Company authorized Mr. Poston to draw on them personally to the amount of five thousand dollars. This authority, as will be seen hereafter, was of great service to the Company. In the month of July, feeling that it was very desirable to interest Eastern capitalists in the business of the Company, the Secretary proceeded to New York with specimens of the ore and the title papers to its property, with the intention of disposing of one thousand shares of the stock at fifty per cent., and so far succeeded as to make an arrangement for this disposition conditioned upon the immediate organization of the Company under the general laws of Ohio. In accordance with this arrangement, on the 11th day of August, the certificate of organization was duly signed, and on the 13th of the same month, was filed in the proper department at Columbus. A report was prepared, embracing the actual condition of the property of the Company, its organization, its titles to its property, the assays of its ores by various eminent scientific gentlemen, and an estimate of its probable results. In the meanwhile, the failure of the Ohio Life Insurance and Trust Company took place, and a general financial crisis came on, such as our country had probably never before witnessed. Speculation and investment ceased; every man had as much to do to protect himself as he was able, and the negotiations at the East were broken off. The parties were unable to take the stock, and the Company was again left to the private resources of its officers. The Ohio Life Insurance and Trust Company, whose unfortunate failure was the commencement of the difficulties of the year, from its previous leading position among the banking houses of the country, had been selected as the means of sending money to the party at Tubac. Its drafts were protested for non-payment, and the working party was at once deprived of its whole means of support. In this emergency, the letter of credit from the President and Secretary enabled them to continue the operations of the Company, and keep together their force, although somewhat reduced in numbers. In the meanwhile the officers placed additional funds at Fort Yuma, and did what they were able to do at this distance, to relieve the disasters occasioned by the failure of their bankers.

Such was the condition of things when in the month of December the Company received proposals for 1,000 shares of stock, the proceeds to be paid in time for the steamer of Jan. 5th. After full consultation it was determined to accept the proposition, as it would afford at once all the means necessary to complete the smelting works, and render the Company self-sustaining. The proposition was accepted and the proceeds sent promptly to the mines. This arrangement at the time it was made was supposed to be for the best interests of the Company.

In the meanwhile, however, Col. Poston, the Managing agent of the Company had proceeded to San Francisco with abundant specimens of the ores of the Heintzelman Mine, in the hopes of selling some considerable amount of Stock in that city. The ores were assayed with the following results

ASSAY OF ORES IN SAN FRANCISCO.

Assay by L. A. Garnett, of the United States Branch Mint, Silver to the ton of 2,000 lbs. of ore.....	7,040 oz.
Copper.....	278 lbs.
Value of Silver, at \$1 22 per oz.....	\$8,634 00
" Copper.....	111 20
Total value per ton.....	\$8,735 20

Assay by Dr. Teelaw, for Messrs. Wass, Uznay & Warwick, practical Metallurgists and smelters, Silver per ton..... 5,000 oz.
Assay by Richard G. Killy, practical smelter, Silver per ton..... 4,998 "

The result of these tests of the value of the ores was a contract made in Nov. 1857, with Wass, Uznay & Warwick for the smelting of 25 tons of ore to be shipped by Mr. Poston on his return to the mines. The ore to be selected by an agent of Wass, Uznay & Warwick, and an estimate made of its value before shipment.

Upon which shipment, Wass, Uznay & Warwick were to allow Mr. Poston to draw on them for half its estimated value, the balance to be paid on the reduction of the ore. In accordance with this contract $7\frac{1}{2}$ tons of ore have already been shipped, and the balance is going forward. The estimated value of the ores was two thousand dollars per ton, and the Company have been allowed to draw on the shipment already made, to the extent of \$7,500. This arrangement at once put the Company in funds to meet the expense of completing its works, and had it been known in season would have rendered the sale of any large amount of stock unnecessary. This sale has been the result of the length of time occupied in communicating between the Company and its working party. It is the only one of this kind that will be made. The Company have now the means of completing the works, and will soon be in condition to repay its stockholders with dividends.

A gratifying evidence of the value of the mines is afforded in the fact that the agent of Messrs. Wass, Uznay & Warwick after a thorough examination of the property of the Company has decided to enter into its service, and is placed at the head of the Amalgamation Department. A suitable person has also been secured to take charge of the smelting works of the Company, and the staff of officers is now filled by as competent men as can be found anywhere in our country.

The amount of stock now issued by the Sonora Exploring & Mining Company is 9,267 shares. The assets of the Company are as follows:

PERMANENT ASSETS.

Number of mines owned by the Company.....	80
Acre of Land in the Arivaca Rancho valuable for Agricultural purposes.....	17,700
Arms, Equipments, &c.....	\$ 5,000
Buildings at Tubac.....	10,000

AVAILABLE ASSETS.

Invoice of Goods shipped to San Francisco....	\$ 10,000 00
Cash balance in San Francisco from previous remittances.....	9,272 23
Half proceeds of shipment of $7\frac{1}{2}$ tons of ore.....	7,500 00
Proceeds of sale of stock in San Francisco.....	12,500 00

Present available means.....	\$ 39,272 23
Estimated cost of reduction works.....	10,000 00

Balance to credit of future operations....	\$ 29,272 23
Ore now raised and ready for smelting.....	85,000 00

Drafts of Ohio Life Ins. & Trust Co....	\$2,325 00
Market value of do. at 35 per cent.....	883 75

Total..... \$115,155 98

ESTIMATED REVENUE FOR 1858.

Col. Poston the Managing Agent of the Company at the Mines, gives the following estimate of the revenue of the Company from the Heintzelman Mine for the coming year.
Revenue per day..... \$ 2,700
" per year of 300 days..... 810,000

The following estimate of the value of a small section of the Heintzelman Vein is given by Col. Poston in his Report dated Jan. 31, 1858. "A space 150 feet long, 25 feet deep, and 3 feet wide, will yield at a calculation of 200 lbs. per cubic foot, 2,250,000 lbs. of ore, valued at \$2,250,000, and can easily be raised with 10 hands in 12 months."

The attention of the officers of the Company has been engaged with the condition of the country and the best means of securing the early and profitable development of all its mines. The property of the Company is located in four distinct tracts: to wit, the Santa Rita tract, containing twenty-four veins; the Arivaca tract containing twenty-five mines; the Cerro Colorado tract containing

twenty-nine mines; and the San Coyetano tract containing two veins. The Santa Rita tract lays twelve miles east of Tubac. The Cerro Colorado tract lays eight miles west of Tubac. The Arivaca tract lays fifteen miles south-west of Tubac, and the San Coyetano tract lays about eight miles south-east of Tubac. It will require all the energies of the Company and all its present force for several months to come to develop the Heintzelman mine, and the Cerro Colorado and Arivaca districts. Any detraction from these would delay practical results longer than the good to be derived would justify. It is therefore all important for the Company that its working party should be allowed to continue its operations as it has begun.

The condition of the country too is of great importance to our Company. Without inhabitants or the protection that numbers must give, our property is not worth a tithe of what its value will surely be when the whole country is settled with an enterprising and thrifty population; when mining, mechanics and agriculture are actively pursued, and when property has appreciated as it naturally will in a thickly settled country. It is therefore our true interest to secure the early settlement of the country by as good a class of citizens as it is possible to induce to go there.

Our own experience for the past two years, and the universal experience of Silver mining shows too, the absolute necessity for the development of this country by associated labor. The enterprise of private individuals found an ample recompense in the placers of California, where a washbowl and a spade were all the investment necessary to the business of the miner. But in Arizona a large outlay of capital, in the regular opening of shafts and galleries, and the erection of suitable machinery, and smelting and amalgamation works, and the employment of a large force of workmen, all conspire to render the business of mining the peculiar province of associated capital.

These two considerations, the early development of the mines and the desire to induce a suitable settlement of our own immediate neighborhood have induced the officers of the Company to propose the formation of a Branch Company, to be designated the Santa Rita Silver Mining Company, with a capital of one million dollars, and to offer the ownership of the Santa Rita tract for one half the stock of this Company, unassessable, or in other words, to offer the Santa Rita mines to a company to work on shares. The advantage to be derived by the Sonora Exploring & Mining Company from such an arrangement would be to forward the development of these mines at least a year in point of time, and to secure the presence in their own neighborhood of a large body of American citizens having a common interest with them, both for protection and development. These objects cannot fail to recommend themselves to your favorable consideration, and they are now submitted for your approval.

The advantages to be gained by the Santa Rita Silver Mining Company, will be also a vast saving of time in proceeding directly to mines already opened and known to be of immense value, and the protection and aid that must naturally follow from their nearness to the headquarters of the Sonora Exploring & Mining Company. It is proposed to assess the stock of the Santa Rita Company twenty per cent., which will furnish on the half million of stock to be sold, one hundred thousand dollars, a sum amply sufficient to furnish machinery and supplies, and put the work in actual operation, as well as to extend the interests of the Company. The subject is already before a number of parties, and will probably be taken up at once if it meets the approval of the stockholders of the Sonora Exploring & Mining Company. The officers unhesitatingly recommend it as a measure which will be of mutual benefit to the two Companies.

In the conclusion of this report the officers cannot but express the gratification they feel at the present brilliant prospect of their enterprise. The realization of at least one dollar per pound on seven and a half tons of ore, its enormous profits on a shipment to San Francisco, and the prospects of the early completion of the smelting works of the Company on a scale small, it is true, compared with the number and extent of the mines, but yet large as regards the gross proceeds to be expected from their operation, leaves no doubt that they will soon realize a return from the undertaking which their enterprise and intelligence has carried to its present point. The Sonora Exploring & Mining Company has the proud satisfaction of being the first permanent company which has opened mines in this hitherto wilderness territory. It remains for them to keep the lead which they have thus obtained, and carry with all their operations an influence which shall benefit while it develops this portion of our country.

MONETARY AND COMMERCIAL.

The market for the week has exhibited no features of any striking character. The payments of the 1st and 4th, as noted in our last, although heavy, were met very promptly. Since the fourth there has been more ease in financial matters, owing to the fact that very few large preparations were going on, and currency is in fair supply. We quote discounts moderately easy in the regular way, at 10 to 12 per cent. Outside rates 12 to 24 per cent. for paper that will bear scrutiny, and higher for other grades.

Exchange on the East has declined to $\frac{1}{2}$ buying and $\frac{1}{4}$ selling. This is due to the movement of produce to the seaboard in consequence of opening navigation and the Spring resumption of business. We quote New Orleans at par buying to $\frac{1}{2}$ premium selling.

In New York we notice an improvement in monetary affairs. Stocks exhibit more firmness. Capital is abundant. Sterling exchange is quoted at 106 $\frac{1}{2}$ to 109.

SALES AT THE NEW YORK STOCK BOARD—April 12.

\$2,300 U. S. 6's, '67.....	115
1,900 N. Y. State 5's, '69.....	100
12,000 Ohio State 6's, '60.....	100
1,000 Virginia 6's.....	92
1,000 Ind. St. 5's.....	65
2,000 Miss. 6's.....	83 $\frac{1}{2}$
2,500 Cal. 7's.....	85
7,000 Mich. 6's, '75.....	50
2,000 Ill. F. B.	88
2,000 Terre Haute and Alton 2d mort. Bonds.....	42
1,000 La C. & Mil. G. B's.....	34 $\frac{1}{2}$
3,600 Miss. 6's.....	83 $\frac{1}{2}$
1,000 N. Y. C. 6's.....	91 $\frac{1}{2}$
30 Pacific Mail St. Co.....	76
250 Shares New York Central.....	68 $\frac{1}{2}$
100 " Chicago & Rock Island.....	76 $\frac{1}{2}$
295 " La Crosse & Milwaukee.....	9
400 " Erie R. R.....	23 $\frac{1}{2}$
225 " Hud. River R. R.....	25 $\frac{1}{2}$
100 " Harlem R. R.....	13 $\frac{1}{2}$
100 " Reading.....	44
20 " Mich. Cent.....	66
300 " Mich. S. & N. Ind.....	24 $\frac{1}{2}$
260 " Mich. S. & N. Ind. pref.....	49
14 " Galena & Chicago.....	90
100 " Cleveland & Toledo.....	45 $\frac{1}{2}$
20 Shares Milwaukee & Miss.....	34 $\frac{1}{2}$
100 " Clev. & Pitts.....	13

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,

AND AT PRIVATE SALE.

April 14, 1858.

BONDS.

\$5,000 Little Miami R. R. Co. 6 per cent.	1st Mort. Bonds.....	77 $\frac{1}{2}$ and int.
\$2,000 Little Miami R. R. Co. 6 per cent.	1st Mort. Bonds.....	78 "
\$3,000 Ohio & Miss. R. R. Co. 7 per cent.	Construction Bonds.....	30 "
\$7,000 Cov. & Lex. R. R. Co. 7 per cent.	2d Mort. Bonds.....	55 to 56 "
\$3,000 Cov. & Lex. R. R. Co. 7 per cent.	3d Mort. Bonds.....	35 "
\$1,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....		74 $\frac{1}{2}$
\$5,000 Cin. Ham. & Day. R. R. 7 per cent.	2d Mort. Bonds.....	75
\$2,000 Hillsboro & Cincinnati R. R. Co. 7 per cent. 1st Mort. Bonds.....		25
\$2,900 Col. & Xenia R. R. Co. Dividend Bonds, due in '69.....		90
\$4,000 City of Cincinnati 6 per c't. Water Loan Bonds, due in '65.....		91
\$750 Little Miami R. R. Co. Dividend Scrip.....		77

STOCKS

100 Shares Little Miami R. R.....	77 $\frac{1}{2}$
69 " Columbus & Xenia.....	75
50 " Indianapolis & Cincinnati.....	46
25 " Farmers Bank, Ky.....	114
33 " Cincinnati & Harrison Turnpike Stock.....	28
50 " Merchants and Manufacturers Ins. Co. Stock.....	85
\$5,000 Certificates Deposit Ohio Life Ins. and Trust Co. Bank.....	35

The Earnings of the Galena and Chicago Union Railroad Company for the month of March, 1857 and 1858, were:

	1857.	1858.
Freight.....	\$70,953 26	\$59,331 95
Passengers.....	54,128 67	36,071 72
Mails, etc.....	3,269 01	4,000 00
Total.....	\$128,352 94	\$103,209 67

Corrected Earnings for February were \$74,180 89.

DELAWARE & HUDSON CANAL COMPANY.—

The annual report of the Delaware and Hudson Canal Company has been published. It states that the net profits of the year amount to \$685,386 96, or a little over 9 per cent on the capital stock. The quantity of coal mined and brought to market was 480, 678 tons, a falling off from the quantity sold by this Company during the previous year of 5, 089 tons. Freshets of unusual violence occurred in the Winter and Spring of 1857, by which the stability of the Company's works, at various points, was subjected to a severe test. The damage sustained, though considerable, was much less than might have been fairly looked for. The canal was opened for business on the 13th of May, and closed on the 7th of December. The total number of tons transported upon it was 1,094,618, of which there were 1,024,550 tons of coal, and 70,068 tons of general merchandise. The amount received for tolls from all sources was \$434,507 97. There is no reason to doubt that the canal will be reopened at the usual time, when the business of the Company will be resumed with all the vigor that the condition of the coal trade may seem to call for. At the present moment the demand for coal is very small. Although the prices which now rule for coal are unusually low, the Board see no reason to doubt that, with a careful attention to economy in the conduct of its affairs, the business of the Company will continue to yield a satisfactory return to its stockholders. On the 15th inst. Mr. John Wurts, after twenty-seven years of devoted service, resigned his office as President of this Company.

New York Tribune.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturers, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and in all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—1y

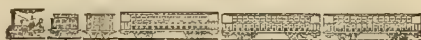
RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1857. VOSE, LIVINGSTON & CO.,
Mar. 25, 1f. 9 South Williams St., N. Y.

INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,
AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Keosauha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

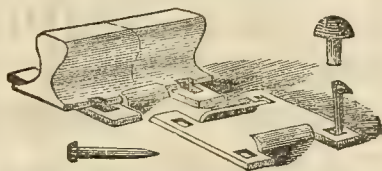
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary Information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN

Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.

Feb 28

CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURGH.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855.

[Jan-1y]

Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, at Broadway, New York.

no13

10 Wal.

ar Broadway, New York.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT,

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON, feb5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jy23-1m

D. M. CARHART.

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART,

oct129-6m

Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers,

Removed to No. 67 West 6th St.

CINCINNATI, O.

Norris' Locomotive Works.

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

Jy 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap 8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,
RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb 5-1y

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858.

For the Grubbing, Grading, Masonry, Bridging and Cross Ties for the First Division of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK,

Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.

March 18—24.

IRON BOILER FLUES
PASCAL IRON WORKS.MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,
PHILADELPHIA. Aug

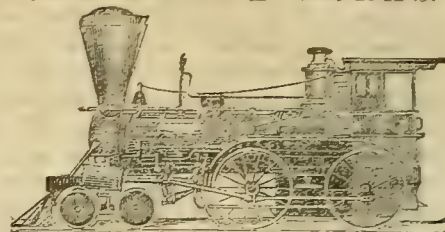
RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons
rails 49 lbs. per yard. 1,000 tons rails 55 lbs.
per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

J. H. GOODMAN & CO.,
no. 7 Wall st., N.

Feb. 7. '56-2m.]

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Scraping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 20

MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings.

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers. Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES.

Of the late firm of Bridges & Bro
JOEL C. LANE

feb 4tr

MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.

These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floors, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 50 feet span, 8,000 lbs. weight,
\$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2600 lbs.
weight, \$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 52 squares, \$1300, or
\$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES.

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc.; and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

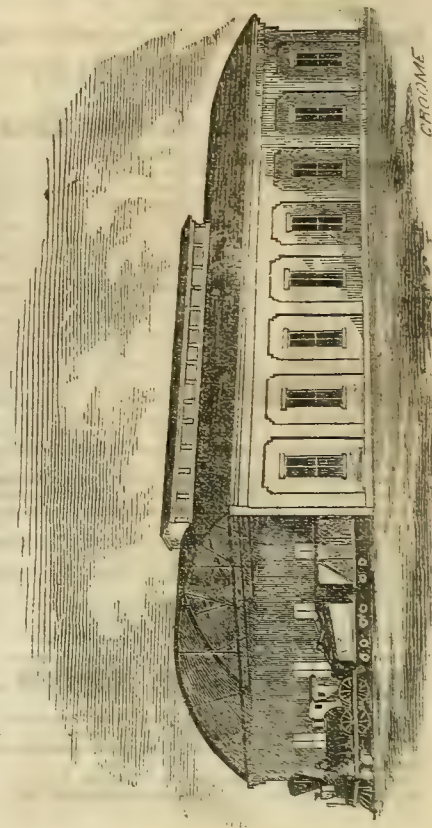
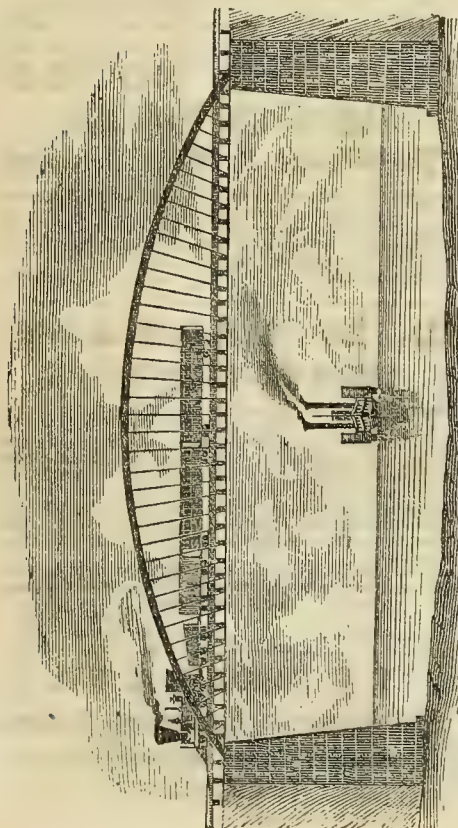
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 66 West 3rd Street, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 18, 1858.—6m.



WAREHOUSE

No. 5 FRONT STREET

Opposite Public Landing,
Cincinnati, O.

PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,

STATIONERS, BOOKSELLERS,

-AND-

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(SUCCESSORS TO JACOB ERNST.)
112, Main Street, Cincinnati

J. T. CRAPSEY,

ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

SCHENECTADY

Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

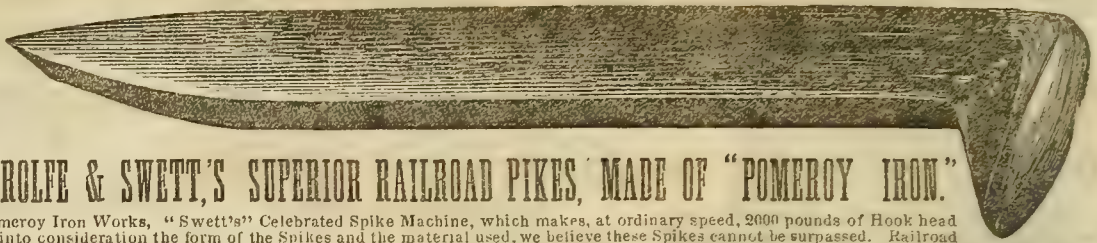
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

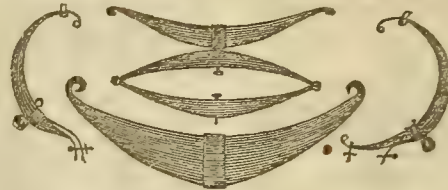
The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Sup't. Au16.1y



MCDANIEL & HORNER,
LOCOMOTIVE AND CAR
MOTIVE SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, APRIL 22, 1858.

Railroad Record

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R. R. CELEBRATIONS OF 1857.

We are indebted to the Editor, W. Prescott Smith, Esq., of the Baltimore and Ohio R. R., for a copy of his work, the great R. R. Celebrations of 1857. This work is one of great interest, both for the subjects on which it treats—the pleasantest, and most extensive reunions of Railroad and financial men that ever occurred in our country or in any other; and from the style in which these subjects are treated.

The demand for the work has been so great that a second edition is necessary. It is beautifully illustrated with cuts and a map. Our railroad readers should have a copy.

The annexed gives the receipts and expenditures of the Long Island Railroad for the fiscal year ending the 31st of March:

Gross receipts.....	\$325,652 07
Operating expenses.....	186,710 73

Net earnings.....	\$139,941 34
Equipment, interest and rent.....	82,416 19

Resulting profit.....	\$56,525 05
-----------------------	-------------

The Company has no floating debt.

THE FAILURES OF 1857—AND THE PROBABILITIES OF COMMERCIAL FAILURE.

Commerce, or Trade, is a very uncertain thing. Why is it uncertain? Not altogether, but chiefly, trade is uncertain, because those engaged in it are *speculators*, and not merchants. Many blame credit, or currency, or banks, or government, and possibly some one or all of these may have augmented the hazards of trade; but, the great hazard is the speculative tendency of the human mind. This speculative tendency is increased by the sanguine tendency of numerous young men engaged in business, by the scant information of many ill-educated tradesmen, and by the unlimited freedom and prosperity of our country. The tendency of commercial men here, is to *use credit in betting against time*. It is only a "question of time," say they. It is a sure thing in the end, and they employ *credit*, the merchants most useful and valuable instrument—to conquer time with. Thus speculation is substituted for trade; and the merchant is no longer what he should be—a skilled agent between production and consumption, receiving his fair and honest commission, but a speculator in imaginary wants, with imaginary means. The old and experienced bankers have learned well the difference between the real and the speculative merchants, and while freely *discounting* legitimate bills, look with a jealous eye on the notes of even wealthy men engaged in speculative business.

But, we must turn from this interesting topic to some of the statistical results of 1857, the close of which was so disastrous to many commercial men. We have before us the Circular of one of the large Mercantile agencies, that of *Tappen & McKillop*, giving the Commercial Statistics of 1857; and we shall trace out some of the results. We are very far from supposing that all the statistics furnished in this way, are either perfect or altogether correct. Indeed, we *know* the contrary; but, on the other hand, as they are obtained by constant personal inquiry and observation, they are sufficiently correct, to indicate general results. Messrs. Tappen & McKillop, say:

Since September last we have had weekly advice of failures in Great Britain, and find that from that date to December 31, 878 concerns have gone into bankruptcy, and over 2,000 failures have taken place. The failures in that country have proved much worse, on an average, than those in this; and we think the results of our recent commercial disasters will show as sound a state of commercial affairs in this country as any in the world.

By referring to the annexed statement, it will be seen that of 227,048 firms reported on our books, over 6,000 have failed during the year, and that of these, 741 have been total or fraudulent. By total, we mean where no dividend will be paid to general creditors, and confidential creditors will not be paid in full. The aggregate loss by these is nearly twenty millions. From the 6,022 reported,

deduct 741, and it leaves 5,281, which will pay a dividend on an indebtedness of over \$280,000,000. The dividend will not exceed 40 cents, and the loss will consequently exceed \$150,000,000, making a total loss for the year of about \$170,000,000. If to this is added losses by railroads, banks, etc., the aggregate will be very great.

In the number of failures we have not included any extensions, no matter how long, where time only was asked. Some of these have proved failures since January 1, the date to which our statement is made up. Neither have we included in our statement banks, railroads, etc. Our figures show simply the number of commercial failures during the year 1857.

Purchases made in the summer and fall of 1857 are now maturing, and further loss may be anticipated on them; but our statement includes the losses on the fall purchases of 1856. The balance will, no doubt, be against the sales made in 1857, but will not greatly increase the aggregate loss. We may state, however, that during January, 1858, 640 failures have been reported to us, while in January, 1857, only 310.

Some comparison of the number and amount of failures in the respective States will lead to curious results. In the first place, we notice, that of 227,000 firms recorded, 6,000 failed in a single year. These do not include the firms *suspended*; but, only those who absolutely failed. Now, if we look to suspensions as well as failures, probably the excessive number of that year (1857), will be made up in ordinary years by the suspensions or temporary failures. The *proportion*, therefore, of those who fail in some form, or if not *fail* in a commercial sense, yet leave the business with loss, is probably fully equal to that represented in the above figures. We suppose that the *average life* of well established mercantile firms may be set down at some twenty years. If so, then, we may say, that *one-half of all merchants or tradesmen fail*, or go out of business with loss. In this estimate, we suppose the latter class is nearly equal to the former. If these are correct data, it is safe to say, that one-half of all the men who enter into mercantile business, either fail or loose. The chances, then, are at best only equal—whether a merchant fails or succeeds in commercial business. As we remarked, in the first instance, the cause of this is not *innate*, but artificial. The world, at least the world of civilization, must have a large number of men, as factors, or agents, who stand between the producer and the consumer. The world is likewise willing to pay this class liberally. Why, then, do they fail? Simply because, as we said before, that they are not merchants, but speculators. They have given the control of their affairs, not to sober reason, but to imagination. They are not agents but betters.

The following analysis of the cases of failure, in some States, will be interesting:

States.	Failures.	Am't of failures.
New York State and City....	1,075.....	\$112,816,000
Pennsylvania State and City. 733.....		44,705,000

Massachusetts and Boston...	578.....	55,631,000
Maryland and Baltimore.....	135.....	5,241,000
Illinois.....	403.....	7,135,000
Louisiana.....	91.....	8,022,850
Missouri.....	116.....	7,140,000
Ohio.....	515.....	6,128,000

These States contain the large cities, which are the centers of commercial business. The average amount of payments in these States was 38 cents on the dollar. In these eight States, then, there was a dead loss of one hundred and fifty millions of dollars.

These failures, however, as stated by the Commercial Agency, are not out of the whole number of firms, but out of the *number on the books* of the agency. Hence, it is well to look into the *proportion*.

In New York the failures were 1 in 32 of the firms. In Pennsylvania 1 in 30. In Massachusetts 1 in 33. In Maryland 1 in 40. In Illinois 1 in 32. In Louisiana 1 in 39. In Missouri 1 in 53. In Ohio 1 in 36. These bear the mark of a common law, or rule deduced for the whole number of persons in business. New York, Massachusetts, Pennsylvania and Illinois, all have a larger number of failures, proportionably, than Ohio; and probably it is due almost entirely to the rash way of doing business in the Atlantic cities. In New York, Boston, Philadelphia, and from these to many of the cities of the Lakes, a large part of commercial business is like Stock Brokerage, mere gambling.

The mercantile business should be conducted, to be successful, on the most rigid principles, and merchants should be educated men.

PACIFIC RAILROAD BILL.

It is a matter of regret that the proposition for the construction of the great national highway, which must sooner or later connect our Atlantic and Pacific shores, has been made a sectional and political question. A few years ago, when the friends of this measure were few in number, and the people knew but little of its merits, the great political parties ignored its existence entirely. To-day when its friends have made known to the nation its claims, and when the people as a whole called for the construction of a Pacific Railroad as a great national measure, when all the political parties of the day have endorsed it as one of their great measures, when all questions of practicability of route and cost have been settled by surveys made under the direction of army officers of established reputation as well as by private enterprise, there would seem to be but one course for our national legislature to pursue—the straight forward and honest one of gratifying the nation's wishes in the simplest manner. A Bill to provide for the construction of this road has just been laid on the table in Congress till December next—because of petty jealousies between North and South. The North wants the route, and the South wants it, and the middle wants it, and

in the petty strife for the spoils, the great and pressing importance of this measure is wholly lost sight of. California is left for another year to be a foreign colony, only to be communicated with by a circuitous ocean route, and over the territory of another power.

(Correspondence of Railroad Record.)

MAXIMUM HORSE POWER OF LOCOMOTIVES.

Some experiments have been recently made to determine the actual pull exerted by a full sized locomotive. It may readily be supposed that the pull is greatest in starting a train from rest, because under such circumstances the steam exerts its full pressure against the pistons, but when the machine is in rapid motion, even if the steam is allowed to follow full stroke, a portion of the pressure is lost in the violent rush of the steam through the passages. Another consideration which limits the ability of a locomotive to pull with great force at high velocities, is the inability of the boiler to generate steam with sufficient rapidity. Every revolution of the wheels, under such circumstances, takes from the boiler some 12 cubic feet of steam, and when, as is frequently the case with passenger trains, the driving wheels make more than 200 revolutions per minute, the boiler would be required to deliver about 40 cubic feet of steam per second, and it is beyond the capacity of the intensely heated fire-box and tubes to infuse heat into the water with sufficient rapidity to keep up the pressure within the boiler under such circumstances. Either the pressure must decline, owing to the steam being worked off faster than it is generated, or else the fluid must be economised by "cutting off," or working it expansively. The latter plan is usually adopted. The steam being allowed to follow the piston through but a small portion of each stroke, and then to expand itself while the remainder of the stroke is performed, a much smaller quantity is withdrawn from the boiler at each revolution, and thus the ordinary pressure is enabled to be maintained therein. With the fire urged intensely by the powerful blasts of steam projected into the chimney, a broad gauge locomotive is capable of generating at 120 pounds pressure about ten cubic feet of steam per second. So long as the speed is not sufficient to consume this amount, with the engines receiving steam full stroke, the locomotive is capable of pulling, with her full force, minus the slightly increased resistance due to the air on the front of the locomotive, and on the arms of the wheels, etc., and minus the diminution of pressure due to the "wiredrawing" of the steam in its rush through the narrow passages interposed between the boiler and the cylinders.

The experiments above referred to, which were tried on the broad gauge locomotives of

the Erie Road, show that the full pressure can in some cases be thus maintained on the pistons of locomotives, until the speed reaches fifteen miles per hour. The actual pull on the coupling between the tender and the foremost car, averaged, in one instance, a trifle over 14,000 pounds. This amount of direct tensile strain, measured by a very accurate apparatus, introduced for this purpose, was maintained on the coupling for a considerable period, while the speed of the train, was, as also very accurately measured, fifteen miles per hour. These figures, if correct, and there appears little room to doubt their accuracy, prove the actual performance of the machine during this period of intense effort, to have been 560 horse power, assuming a horse power to be, as is usually estimated, equal to lifting 33,000 lbs. one foot high in one minute. S.

New York, April 15, 1858.

(Correspondence of Railroad Record.)

New York, April 15, 1858.

MESSRS. EDITORS OF RAILROAD RECORD:

Gentlemen,—Your notice of my surface condenser, in the 1st April number of the *Record*, has caused some inquiries which disclose the fact, that the principles of my invention are but little known.

I claim no ordinary surface condenser merely, but the inauguration of an entirely "new method of applying the power of steam, and of condensing it after it has been applied."*

The application is universal, but at the present moment the great point of interest here (and the same should apply to the muddy waters of the Mississippi and the limy ones of the lakes with almost equal force), is the recuperative supply of distilled water to make up for the waste from the boiler water of ocean steamers, which usually amount to about 25 per cent., and as one of you say this operation is performed by my condensing apparatus, you then saw done that which I believe never had been done before, viz., an abundant supply furnished of distilled water, not only to make up for this waste, but also enough to supply the use of the ship for all purposes whatever, or at least in that proportion, for you saw distilled water supplied equal in weight to three or four times the weight of the fuel consumed. That was the grand desideratum; for, the mere condensation of the exhaust steam from the steam engine, has never presented any difficulty whatever; but, this recuperative supply has never been accomplished before, without the use of about 25 per cent. of boiler, with all the defects intact, which it is the object of a fresh water condenser to annul. In fact, it is very questionable, (particularly when copper tubes are used, as their action is most destructive to iron boilers), if any thing is saved by ordinary surface condensation, excepting, perhaps, the engineer, who has not to *blow off* so frequently, but will most probably allow the sea water to attain the same density as he would, if there was no fresh water condenser on board.

* I have forwarded copies of articles referring to this invention from the Journal of the Franklin Institute for May, 1856, p. 343; Sept., 1857, p. 199; and Feb., 1858, page 94.

It is the absolute necessity for this *blowing off* the saturated salt water, that involves the necessity of pumping as much as 25 per cent. of sea water into the boilers, and not the mere waste from the safety valve, leakage, etc., which, however considerable with the present method of using steam, is greatly reduced by the new one which I have introduced.

Allow me to qualify this expression by observing, more particularly in reference to steamboats, which are required to make frequent landings.

In such cases, at least, an auxilliary engine should be used to work the three pumps, viz., the cold water, the waste supply and the feed pumps, the latter only requiring any appreciable power to work it, and altogether not exceeding the power usually required to work the feed pump alone.

When the word is given to "stop her," no previous preparation is necessary, but the steam is shut off instantly and turned into the condenser, bringing the engine up at the center of her stroke, and there being *held in hand* for a minute, or an hour, or a day, and on the word "go ahead" being given, she may go on finishing *that* stroke, with just as much effect as if she had not been stopped at all, for the cylinder may be kept just as hot as if she had continued to work. The five doors even need not to be opened, except for the sake of economy, as only the necessary working head of steam need to be kept up.

The secret of all this, consists in maintaining a sufficiently high temperature in the exhaust steam of a condensing steam engine, to cause the condensing water in the hot well of the condenser to boil, and not only to boil, but to produce vapor copiously for condensation; in like manner as the exhaust steam from the engine is condensed.

The objects attained by this *new method* of applying the power of steam, are:

Firstly. A steadier motion of the piston than is attainable when the steam exhaust against the atmosphere, as well as less back pressure, because in the latter case, the whole weight of the atmosphere in motion is continually acting and reacting against the piston, that is to say, first by its dead weight which is put in motion by the exhaust steam forcing it out of the exhaust pipe, and next by its return with the same force which was required to eject it, which force has again to be overcome by the force of the exhaust steam, necessarily reacts upon the piston as a dynamic intermittent force, of the heavy atmosphere, and not as a steady statical pressure of the lighter steam.

The difference in the two methods upon the steady working of the engine is audibly perceptible, and that of the back pressure is calculated to be equal to twice the difference of the specific gravity of the steam and that of the atmosphere.

In other words, when the back pressure is caused by the steam always leaving the piston for the condenser, never to return, is equal to 3 lbs. of statical pressure, that which escapes against the atmosphere, and which returns, and has again to be forced back at every stroke of the piston, is equal to 10 lbs. of statical pressure against the power of the engine.

This advantage of the new method in the case of high pressure steam, being analogous to the one obtained by the ordinary system of air pump condensation with low pressure steam.

Secondly. Obtaining a very high tempera-

ture in the feed water, through the medium of the *heater*, without in the *least* degree impeding the exit of the exhaust steam, (which universally results in loss).

Thirdly. Boiling water in the hot well, which affords a copious supply of vapor from the only source possible to make up for the waste from the boiler water, and also for the use of the ship, which does not involve the necessity of a boiler with all the concomitant evils which it has been the object of other surface condensers to avoid, but thus far with no success whatever.

Fourthly. For low latitudes, when the temperature of the condensing water, which so unfavorably affects other surface condensing engines, but has no effect upon this.

Fifthly. The simplicity of the arrangement and its tell-tale character in case of any derangement of its parts, unequalled by any other mode of using steam.

Sixthly. In economy—whether of first cost space occupied or fuel consumed—this "*new method of applying the power of steam and of condensing the same*," is so far in advance of any other known, that ere long it must be the only one in use.

Seventhly. The extreme facility which it affords for instantaneous stoppages, and the practical annihilation of the dead centers.

Eighthly. and last, though not least, the safety insured against explosions, in fact the almost impossibility of one occurring.

As a general rule of thumb, easily to be remembered, I allow 1 lb. of feed water, (when converted into steam) to raise 40,000 lbs. one foot per min., and call that one horse power (1 H. P.), and for its conversion I allow .1 lb. of coal.

This amply provides for all losses of steam in those parts through which the piston does not travel, as well as all other sources by leakage, and friction of the engine and pumps.

The quantity of condensing water required is 4 lbs. per minute per H. P., of which I propose to carry off, in the shape of vapor, one-tenth or .4 lbs., as follows, viz.: .1 lb. to be devoted to the making up of the waste of the boiler water, and .1 lb. to the use of the ship, both condensed into water, but the other .2 lb. I apply as vapor to increase the draught of the chimney, thus transmitting the heat of .2 lbs. of the exhaust steam into the steam or vapor of the hot well, and leaving 3.8 lbs. of the condensing water to condense the remaining .7 lbs. of the exhaust steam, excluding the .1 lb. which we have supposed to be wasted by leakage or its heat by radiation, etc.

This small amount of condensing water is amply sufficient; for, not only does the feed water take up in the heater much of the heat from the exhaust steam, but as the water from the hot well is fully lasting, and there is always free egress for its vapor to escape, a balance is kept, with unerring accuracy, between the latent heat of the exhaust steam and the sensible heat in the condensing water, through the medium of the conversion of the necessary quantity of the latter into vapor; that is to say, by a mere transfer of the latent heat of the exhaust steam into the vapor of the hot well.

It is possible to transfer *all* the latent heat of steam confined in a closed vessel into water outside of it, and therefrom into vapor, but practically it is attended with disadvantages.

The invention which I claim, resolves itself into the practical application of this princi-

ple, to an extent not involving the disadvantages alluded to, and yet affording a copious supply of pure, fresh water for all purposes, even though obtained from the foulest condensing water, if as thick as hasty-pudding stuffed with clam shells.

I am, very respectfully,

THOMAS PROSSER.

Railroads.

N. O. OPELOUSAS, AND GREAT WESTERN RAILROAD COMPANY.

The President of this Company in his report to the Stockholders, says:

The effects of the revulsion in monetary affairs, commencing in October last, have been so extended and disastrous, that you must have anticipated the conclusion to which we have come, that further progress in construction must be suspended until a favorable change shall enable us to effect negotiations, which are, at present, impossible. Our report, therefore, will be confined to a statement of what we have done during the year, and what we purposed doing, when interrupted in our designs by events that have so seriously interfered, not only with most works of a similar character, but with all interests, public and private, throughout the country.

In our last report we stated that the construction of the road had already exhausted the *realised* means of the Company, but that it was the intention of the Board of Directors to collect the taxes due in the parish of St. Mary, and to finish the work to Berwick's Bay, as the natural and most suitable terminus of the lower section of the road, and there to establish, at once, a permanent depot, with wharves for steamships, &c. We reported a contract for a line of steamships to run between that place and Galveston; and that after having reached the Bay, the attention of the Board would be immediately directed to the continuation of this important work thence to the Sabine the means for effecting which, to be raised by bonds based on a mortgage of the *First Grand Division* of the road, free of all incumbrances; and the loan to be extinguished by the proceeds of the public lands donated by Congress.

These and other matters referred to in that report, have had our most careful attention.

The extension to the Bay was a necessity; that point reached, the *First Grand division* became a complete road in itself. The communication with Galveston by a line of steamships, so long desired, now followed as a natural consequence; and the continuation across the Bay and thence to the Texas line, in accordance with the provisions of the charter, was considered a duty of the utmost importance.

With exhausted means, and collections slow and uncertain, the work before us at the commencement of the year was one of no little difficulty and anxiety. The Bay was, however, reached in April—the communication with the line of steamships effected in May—large and commodious wharves were constructed, and there are now being erected suitable buildings for the accommodation of the business at that important station.

This line of steamships furnish greatly increased facilities for the transportation of passengers, freight and the mails to and from Texas, and but for the present insufficient depth of water on the bar of the Atchafalaya, could be operated with the greatest dispatch

and regularity. This difficulty could be removed at very inconsiderable cost, and should have immediate attention.

The line to the Sabine, definitely fixed by the Board, and reported at your last meeting, has since been staked out—maps of the same prepared and deposited as required by law. The Act of donation by Congress was accepted by the Legislature of our State at the last session, and all the rights acquired by it transferred to this Company, so far as we were interested. All the formalities required to invest us with a conditional title to the donated lands having been complied with, bonds of the Company were issued to the amount of two millions of dollars, for the purpose of raising funds for an immediate commencement of the construction of the road from New Iberia to the boundary of Texas.

We had every reason to expect an early sale of those bonds, and a correspondence on the subject was opened, but recent events have disappointed these anticipations, and waiting a more favorable state of affairs, we are compelled to defer, for the present, the construction of the road beyond the Bay.

The City of New Orleans being largely interested in this Company as Stockholder, it gave us pleasure, in answer to a request from the Mayor, to present him, on 25th September last, with a statement of its affairs to that date. This statement, as containing information interesting to the Stockholders generally, is now copied into, and made part of this report, as follows:

Office N. O., Opelousas & G. W. Railroad Company,
New Orleans, Sept. 25, 1857.

To His Honor, C. M. WATERMAN,
Mayor of New Orleans:

Sir:—Agreeably to your request, I have now the honor to present you a statement, showing briefly the condition, progress and anticipated results of this road, given in general terms, and the figures in round numbers, without aiming at exactness. If any more minute or extended information be desired, I will furnish it with pleasure, or would be happy to afford you the opportunity for a personal examination.

The condition of affairs is somewhat thus: The authorized capital is \$6,000,000, and the subscriptions as follows:

State, in bonds.....	\$1,200,000
City ".....	1,500,000
Parishes and individual subscriptions, and City Tax.....	1,530,000
Total subscription.....	\$4,230,000
Unsubscribed.....	1,770,000
	\$6,000,000

Of the subscribed stock there is yet unpaid—State, which issues bonds only in proportion to other payments.....	\$393,000
City, uncollected Taxes &c.....	63,000
Parishes and individuals.....	493,000
Difference between par value of City Bonds and the amount borrowed on them, about.....	284,000
	\$1,430,000
Total subscriptions as above.....	4,230,000

Leaves as actually realized..... \$2,800,000
Less than one-half of the authorized capital.

The sum borrowed on pledge of the City Bonds, constituted the whole debt of the Company at the date of the last annual report, with the exception of about \$30,000 on mortgage, and some ten or twelve thousand dollars in current debts. An increased business has, however, compelled us to provide increased means of transportation. These, with the settlement of an old claim of some \$80,000, have added considerably to our debt. We hope, however, to clear off the whole of this,

during the current year, from collections of balances due, and our increased receipts.

PROGRESS.

The road from Algiers to the Texas line is 257 miles in length. It is completed to Berwick's Bay, 80 miles, and is there connected with Texas by a line of steamships, running regularly semi-weekly, and an additional ship to be put on in November. The earnings of the completed section were unfavorably affected by the short sugar crop of the past season, but the summer's business shows a large increase.

The receipts for passengers and freight in June, July and August of 1856, amounted to..... \$38,515 87
And in same Months in 1857 to..... 62,213 27

Difference..... \$23,697 40

or 62½ per cent. The increase on freight, separately, was 80 per cent. The whole receipts for the year 1856, amounted to \$206,000. Notwithstanding the drawback referred to, they may reach \$275,000 at the close of the present year, and we think \$400,000 a perfectly reliable estimate for 1858.

The road is now in running order to Berwick's Bay, but considerable outlays are yet necessary to place it in perfect condition and erect some warehouses at the Bay. Our total receipts are exhausted in the construction of the 80 miles of the road to the Bay, including bridges, depots, &c., &c.

PROSPECTS.

We have now to cross Berwick's Bay, and continue the construction to the Sabine, 177 miles. The Chief Engineer, after careful calculation, estimates the entire cost, including the Bay Bridge, at \$3,000,000, and for this construction our principal reliance is on the proceeds of the public lands, conditionally donated by Congress. These lands, and the funds to be raised for securing the donation, are now subjects of vast importance to the State and City.

The line of our road has been recently run out to the Sabine, and the report of the Chief Engineer is very favorable, both as regards the value of the lands, and the facility and cheapness of construction of the road through them.

We will be entitled to six sections per mile, equal on the whole line of 257 miles, to 986, 880 acres. Making liberal allowances for entries, &c., we can, we think, calculate on 750,000 acres, amply sufficient, it is estimated, to build and equip the whole road from Berwick's Bay to the Sabine, including the cost of the Bay Bridge.

To comply with the conditions upon which these lands are to be acquired, the Company has issued 8 per cent. bonds to the amount of \$2,000,000, payable in 13 years, based on a mortgage of the complete and separate road to the Bay, now in full operation, and redeemable from the proceeds of the sale of lands beyond Opelousas, specially pledged for that object.

Were it not for the existing difficulties in monetary affairs, it is thought that these Bonds, so perfectly well secured, and the means for payment of which at maturity, are so well provided for, could be negotiated for funds to be furnished from time to time, as might be required, for the construction of this great work to the Texas line. We fully expected to commence operations in October, but we are now met with difficulties not anticipated. It will be apparent to you, that it is a matter of the utmost importance to the business of this city, that the Opelousas Road should be continued to the Texas line, within the shortest practicable time, and that the munificent donation of Congress should be

secured. This sum of \$2,000,000 in Bonds, the proceeds of which would be required only in moderate amounts, extending over a period of years, could be very easily managed by a concert of action among our Banks, Insurance Companies and capitalists, and the vast benefits of this enterprise be almost immediately realized.

The means of effecting this object are here pointed out; these are mainly the negotiation of the bonds. We are very anxious to go on—and rapidly—but taught by the experience of similar undertakings elsewhere, this Company will not enter into any engagement or contract until the prompt and full satisfaction of such obligations shall have been made a matter of certainty; but we will make every exertion possible, with the limited means actually at our command, to push forward the work of preparing the road-bed from New Iberia to Opelousas. In the meantime we must be content that the road, so far as constructed, is doing a good business, will pay expenses, and probably a small amount on the outlay.

We believe the road can be finished to the boundary of Texas for \$3,000,000, that the lands will bring at least that sum; that the Bonds, if negotiated, can therefore, be punctually paid from the proceeds of the lands, the existing mortgage on the section to the Bay cancelled, and the subscribed stock of the Company remain untouched.

E. I. & C. S. L. R. R.

Address to the Board.

GENTLEMEN OF THE BOARD:—As you have met to day at my call to hold a session of the board it is proper that I should state the purposes that induced me to convene an extra session. The most of us have been connected with this enterprise from the first organization of the Company, and are familiar with its whole proceedings.

With myself, you are witnesses of the good faith, the high and brilliant prospects with which we all entered into the enterprise, and with what confident hopes we became associated. The City of Evansville subscribed \$200,000 and the City of Lamasco subscribed \$50,000, while individuals on the line subscribed liberally—none doubted at that time of ultimate success. To insure that success the Board, unanimously, with the approval of the entire stockholders so far as reached the directors all of whom were re-elected by the stockholders after the contract was made, entered into a written contract that was spread upon the record at the time with Willard Carpenter & Co., responsible and energetic men, having large means of their own, the reciprocal terms and conditions, of which speak for themselves. The contractors have done a large amount of work on the road, but with all their energy and perseverance have not been able to contend with the adverse change of times and embarrassments that have been thrown upon them, and the work remains in an unfinished state. For the work already done, and that to be done, on the first general section, I refer you to the report of the late engineer. I do not propose to go into a statement of all the embarrassments the contractors, as well as the Company, have had to contend with, growing out of the change of times, the impossibility of negotiating railroad securities, and the neglect, delay, and refusal of the subscribers to pay, rendering it impossible to progress with the work—suffice it to say that the Contractors are unable to progress

with the work to completion. The stockholders have of course become impatient, many refuse to pay their subscriptions, and have left the Company no alternative but to bring suit against all refusing delinquents without respect to persons, including the City of Evansville for the \$100,000 due on her subscription. The effect of the refusal of our subscribers to pay has been to leave the treasury without means to pay our taxes for 1857, or the interest coupons on our real estate bonds that fell due on the first day of January last. This is especially to be regretted, as these bonds were paid over to the Contractors for work actually done on the road under their contract, and not being negotiable at the time at fair rates, were pledged, as I understand, as collateral security for their individual notes, given by them to meet the estimates and carry on the work, and which bonds, if negotiated at reasonable rates, would be ample to relieve the Contractors as such from all individual liabilities.

I call your special attention to the contract with Willard Carpenter & Co., and the condition of affairs in connection with it, and recommend that the contract be cancelled, with the assent of the contractors, who have been notified of the meeting of the Board, and who, I understand, are ready to surrender it, and that a just and equitable settlement with the Contractors be made. If, however, the Contractors shall not voluntarily deliver up and surrender the contract, you will examine the same, and the condition of the work, with a view of declaring it forfeited and of taking the future construction of the work into the hands of the Company. I trust, however, that there may be no difficulty in that matter, as it is evidently at this time, under all the circumstances, the interest of both parties to cancel the contract amicably, and to settle justly all matters between them. After such surrender and settlement, and the payment of the floating debts of the Company, and ascertaining the net amount of the assets, real and personal, including the value of the work done and paid for, with the materials on hand and the outstanding liabilities of the Company, its true condition can be ascertained. The floating debt of the Company, including the taxes and the interest warrants on the real estate bonds that are due, will not exceed \$12,000. To this there will be added the coupons of the same bonds, as they fall due semi-annually, and ultimately, when the bonds mature, any difference there may be between the real estate conveyed to the trustees to secure their payment. There have been sold by the Company to individuals, in virtue of the powers reserved in the trust deeds of the \$300,000 of lands, included in those deeds only \$28, 012 29, of which there have been paid into the treasury \$16, 029 41, leaving the sum of 12,982.88 unpaid by the purchasers, for which sales the Company will be liable to the trustees, if the balance of the lands conveyed in the trust deeds and remaining unsold, shall prove insufficient to pay the bonds when due, the Company being liable to pay the interest semi-annually, and the principal of the bonds at maturity, while the purchasers of the lands from the Company will hold them free, and discharged from any lien of the trust deeds, under the following express provisions contained in the trust deeds. "Provided, the said real estate, so subscribed to said Company shall be subject to entry and to be conveyed to the purchaser by said Company, discharged from this mortgage at the office of the Company, under the now existing bye-laws of said

Company." The trustees and the bondholders should be fully assured that the temporary default of the company to meet the interest on the bonds was not intentional, and that the coupons due will be paid as soon as possible from the assets of the Company, as it would be disastrous to the bondholders, the Contractors and this Company to foreclose the trust deeds, and sell the lands for the best price they will bring until times revive, and the demand for the lands shall induce purchases at a fair value. To sell them now at a forced sale would result in large sacrifices, which should be avoided if possible, as those lands, properly cared for, and sold at fair rates, in good times, will be ample to redeem the bonds issued upon them.

When the state of the liabilities of the Company shall be ascertained, after the settlement with the contractors, in view of the times and monetary prospects before us it will be for the Board of Directors then having charge of the affairs of the Company, to determine whether the interest of the stockholders will be promoted by looking to the completion of the work by the Company, or by new contractors, in more auspicious times; or whether it will be best for all concerned to prepare to wind up the corporation, and to distribute its net assets among the stockholders. I shall be prepared to acquiesce in whatever course the majority of the stockholders, through their directors, shall determine upon.

It is proper that I should lay before the Board a communication, which I recently received from the attorneys of the City of Evansville, showing the steps that are designed there, to get rid of the payment of the city subscription,

EVANSVILLE, IND., Jan. 27, 1858.

SIR:—Operations on the Evansville, Indianapolis and Cleveland Straight Line Railroad Company have ceased, and there is not the slightest prospect of their being resumed, and the affair of the Company ought to be wound up at once. To collect unpaid subscriptions is useless, and there seems to be no object in doing so, unless it be to pay the funds over to Willard, Carpenter & Co., who already have a vast deal more than they are entitled to, in the form of cash, bonds, stock and land. Yet the Company are prosecuting suits to collect subscriptions. In order to stop these suits, and wind up the concern, and compel Carpenter & Co., to give up whatever they may have more than they are entitled to, it is necessary to elect an entirely new Board of Directors.

This can be done if all the stockholders will attend in person, or by proxy, at the next election. If you prefer voting by proxy, please sign that below, tear it off, and send it to us. Signed,

JONES & BLYTHES, Attorney.

To whom it may concern: John Hewson, Mayor of the City of Evansville, is hereby authorized for me, and in my name and behalf, to give such vote as I may be entitled to give at the next election to be held for the election of Directors of the Evansville, Indianapolis and Cleveland Railroad Company.

February 3, 1858.

Here is a bold attempt to array the delinquent subscribers against those who have paid in full, and to elect a Board who will disregard their oaths, and discharge the City of Evansville from the payment of the balance of her subscription, regardless of the rights

of the creditors, and the individual stockholders who have paid up their subscriptions in full. Is this just? Is it honest, even if it could be done? But these attorneys well know, or ought to know, that the unpaid subscription of the City of Evansville, and all other unpaid subscriptions, are the property of the creditors of the Company, the bondholders, and the other subscribers, who have paid their subscriptions in cash or lands; and they all have a vested right in those outstanding subscriptions that no Board can deprive them of, and should any attempt of the kind be made by any board elected by the City of Evansville and her proxies, it would be enjoined or set aside as fraudulent and void, at the instance of creditors and bondholders, for deficiencies, or of subscribers who have paid up their subscriptions, to equalize the assets, by any Courts of justice having cognizance of the case. Redfield 13, Howard 304, 3 Mason 308.

As to myself, I am indifferent as to the result of the next election. The office I hold has no charms for me. I am willing to retire from the Board at the will of a majority of the stockholders. But while I retain my position, I expect to do my duty regardless of threats from any quarter, that I shall be left off the Board at the next election.

Since the last session of the Board, Oliver H. Smith, Esq., has resigned his office of Attorney for the Company, and I have appointed as his successor, Messrs. McDonald & Porter, Attorneys, of Indianapolis.

JER. SMITH, Pres't.

March 23d, 1858.

ENGLISH RAILWAYS.

We have heretofore given the authentic Reports of the English Railway Companies. We find the following interesting remarks on this subject in a late number of the Journal of the Franklin Institute. They were presented at the regular meeting of the Institute by a gentleman formerly at the head of the Railroad Advocate.

Mr. Zerah Colburn presented some statements of the cost, working, and construction of English Railways. The average receipts and expenses of all English and French lines, per mile run, were, for 1856:

Receipts, \$1.44, Great Britain;	\$2.03, France.
Expenses, .63, " "	.87, " "

For the railroads of New York, for 1855, the receipts were \$1 76, and the expenses of operating \$1 per mile run.

The cost of maintenance and renewal of way, and of "engines and working," was for the railroads of New York 70½ cents per mile run, against but 36½ cents in England, and 42½ cents in France. Maintenance of way averaged upon all the British lines, for 1855 and 1856, 10.56 cents per mile run. In France (1855), 7.8 cents; in New York, 23.2 cents. For the railroads of Massachusetts, this item of expenses has been as follows:

1855.....	25.40 cents per mile run.
1856.....	28.53 " " " "
1857.....	26.77 " " " "

Eighty miles are run for each ton of coke or coal consumed on all French railways. In Great Britain, the mileage per ton of coke or coal is 77 miles. In the Northern United States, equaling wood to coal, the average is 44 miles run to a ton. The average cost of fuel, per mile run, is about 6 cents in Eng-

land, 11 cents in France, and 18 cents in New York and Massachusetts.

The average weight of passenger trains, including engine and tender, was given as 95 tons in England, and 130 tons in New York. On the other hand, the speeds in England average 25 per cent. higher than in this country, being 28 miles an hour for passenger and 15 miles for freight trains, including stops.

The grades of English lines, though on the whole more favorable than in the Eastern United States, were sometimes severe. There were frequent instances of grades, of 80, 100, 117, 120, 143, and some even of 196 feet per mile, on English lines, in every case worked by locomotive power.

The alignment of English and French lines was more favorable than that of American lines.

The climate of England, though not presenting such trying circumstances of frost and snow, and severe summer heat, had nevertheless some severe peculiarities, as compared with that of the United States. There is an average annual fall of over 60 inches of rain in England, much of which falls on a treacherous clay soil, rendering liable frequent slips, besides soaking and settling of road-beds.

The prices of labor and iron were on an average two-thirds of those in the United States. Cross ties, on the other hand, cost from four to five times as much, and ballast nearly double. Coke averaged \$4.50 a ton in England, and \$9 a ton in France.

Allowing for all these circumstances, Mr. Colburn believed there was an absolute economy of from 30 to 40 per cent. over the corresponding results on American railways. He attributed this chiefly to superior construction, embracing the earthwork, drainage, ballast, distribution and preservation of sleepers, the make and form of rail, rail joints, &c.

Much of the notoriously great cost of English lines had gone for items, wholly independent of the quality of the permanent way, and to such extent the cost of English lines was not chargeable to their superior construction.

Of such items were the following:

1. Parliamentary expenses, \$7,500 per mile.
2. Land and damages, \$43,000 per mile.
3. 70 miles of tunnels, costing \$5,000 for every mile of railway in the kingdom.
4. 68,300 cubic yards of earthwork per mile on all British railways, costing \$20,000 per mile.
5. 30,000 railway bridges, varying in cost, from the Britannia bridge of \$3,000,000, down.
6. Three-fourths of all the lines are double track.
7. Stations $2\frac{1}{2}$ miles apart on all the lines in the kingdom, many of them very large and expensive.
8. Station approaches, including viaducts, of which were over fifty miles.
9. Equipment. That of the London and North-western line cost \$22,000 a mile; and on other roads the cost was proportionately heavy.

A mile of first class English permanent way, at English prices, cost but little more than a mile of ordinary American railway at American prices, including only earthwork, ballast, sleepers, rails and fastenings, and laying.

In answer to a question from a member of the Institute, Mr. Colburn stated that the

average dividend on all English railway share capital was for 1856, $3\frac{1}{2}$ per cent.

The earthwork of English lines was more carefully laid up than is usual here; the cuttings and banks were wider at formation level, the slopes flatter, and grassed or sown, the drainage very thorough—sub-drainage being much practiced in difficult situations. The ballasting was deep and thorough, being 26 feet wide on double track, and two feet deep, one foot of which was under the ties. The ties were nine feet long, ten by five inches section, generally squared, spaced, in most cases, three feet apart centers, and were generally preserved, either by saturation with coal-tar, creosote, or sulphate of copper. The rails were mostly of the double head form, five inches deep, and weighing 72 pounds per yard. There was a general conviction in favor of lighter rails; 70 to 75 pound rails were taking the place of 85 and 92 pound iron. So, on the continent, 62 to 74 pound rails were taking the place of heavier bars. The height of the rails, five inches, was preserved, but the stem and head were lightened. A lighter head was found to give an advantageous elasticity, whereby the iron was saved from battering out. Much more pains was being taken in the manufacture of rails. The continental rails were flat-footed, and fastened by spikes, as on American roads.

The best form of English rail-joint fastening was believed to be a pair of angle-irons, each 18 in. long, bolted by four bolts, through the rail at the joints, and spiked also to the sleeper. If the bolts got loose, the pressure of the rail on the heads of the angle-irons, tended to nip them closer together; so, the angle-irons gave the rail great lateral support. About eight tons of angle-irons and bolts were required per mile of single track, for an ordinary weight of rail.

Raw bituminous coal was being burned with entire success on English passenger locomotives. No smoke whatever was made; the control of steam was satisfactory, and the evaporation was as high, on the average, as $8\frac{1}{2}$ pounds of water per pound of coal. The boiler was externally of the usual form. The fire-box was extended four feet into the barrel of the boiler, forming a combustion chamber. In addition, a transverse partition divided the fire-box into two compartments, each having its own grate, ashpan, damper, and door; a slow coking fire was kept in the front compartment, the front damper being closed. The active fire was maintained in the rear compartment. The gas arising from the coal was deflected upward and backward into intimate mixture with air, entering through some 200 small holes in the inner plate of each door. It then passed through a loose grating of fire brick, being then deflected down upon the front fire, and thence passing through an arching and faggot of fire brick bars and tubes, to the ordinary tubes of the boiler. The philosophy was simply to secure intimate mixture of the carburetted hydrogen and air, and, by the great heat of the firebricks, to ignite the gas wherever and whenever the mixture was completed. Twenty-five were running on the South-Western railway of England; and the Great Western, the East Lancashire, and the Belgian roads had adopted the same plans.

The earnings of the Terre Haute and Alton Railroad for March, 1858, were.....\$71 975 08
March, 1857.....71,505 57

Increase.....\$ 469 71

LA CROSSE AND MILWAUKEE RAILROAD.

An Act for an act to provide for the election of Directors of the La Crosse and Milwaukee Railroad Company.

The People of the State of Wisconsin, represented in Senate and Assembly, do enact as follows:

SECTION 1. The next meeting of the stockholders of the La Crosse and Milwaukee Railroad Company for the choice of a Board of Directors of said Company, shall be held the last Wednesday of May next, and annually thereafter, at 10 o'clock in the forenoon of said day, at the office of the Company in Milwaukee.

SEC. 2. The Secretary of said Company shall give thirty days' notice of such meeting by publication in one or more newspapers in the City of New York, and two or more newspapers in the City of Milwaukee, of general circulation.

SEC. 3. The Secretary of said Company shall, at least thirty days before said election, make out and file in the office of the Secretary of State, for public inspection, a correct list of all the stockholders of said Company, with their residence, so far as he can ascertain the same, and the number of shares held by each.

SEC. 4. The Governor of this State shall annually appoint three Inspectors for said election, who shall be sworn faithfully and impartially to discharge the duties devolved upon them by this act.

SEC. 5. The said Inspectors shall meet at the time and place appointed by this act for said election, and proceed to receive such votes for Directors as may legally be offered and received under this act.

SEC. 6. No person shall be entitled to vote for Directors at such meeting, by virtue of any proxy, or power of attorney, unless the same shall have been executed within the twenty days next preceding the day of such election; nor shall the President, Secretary, or any Director of the said Company be allowed to vote upon any other stock than the shares standing in his own name on the books of said Company; nor shall the President, Secretary, or any Director of said Company solicit or request any stockholder to make to any person whatever, a proxy or power of attorney to vote upon the stock of said Railroad Company, and no person shall be allowed to vote by virtue of any proxy or power of attorney so obtained, nor upon any stock held as collateral to any debt from the said Company, nor upon any stock issued sixty days prior to the day of election.

SEC. 7. The said Inspectors shall keep accurate lists of the votes received by them at said election, and the persons voted for as directors. They shall deliver one copy of such lists to the President, Secretary, or Treasurer of said Company within two days after such election, and shall also file one copy of such lists in the office of the Secretary of State.

SEC. 8. If any vote offered at said election shall be challenged by any voter, the Inspectors shall examine, under oath, which they are hereby authorized to administer to persons so challenged, as to his qualifications as a voter upon the stock standing in his name, or by virtue of any proxy or power of attorney he may hold, and may take any other testimony offered by the challenger, and shall decide upon the same before closing the election. Any person who shall be guilty of false swearing upon such examination is

hereby declared to be guilty of perjury, and shall be liable to the penalties thereof.

Sec. 9. The nine persons, being stockholders, who shall receive the highest number of votes at such election, shall be the Board of Directors for the year ensuing said election, and shall continue in office until their successors are elected.

Sec. 10. Any person who shall violate any of the provisions of this act shall be disqualified from holding any place or office under or in said Company for the term of one year thereafter.

Sec. 11. Any officer of said Company, who shall violate any of the provisions of this act shall be deemed guilty of a felony, and on conviction thereof shall be punished by imprisonment in the State prison not less than one year nor more than five years, at the discretion of the Court.

Sec. 12. All laws and parts of laws conflicting with the provisions of this act shall be, and the same are hereby repealed.

Sec. 13. This act shall take effect from and after its passage.

The earnings and operating expenses of the Chicago, Burlington and Quincy Railroad Company for January, February and March, 1883, have been:

Earnings from Freight.....	\$134,140 70
Earnings from Passengers.....	70,765 45
Earnings from Miscellaneous.....	4,539 88
Total.....	\$209,446 03
Operating Expenses.....	142,684 32
Net earnings for first quarter of 1883.....	\$66,761 71
For corresponding period in 1887:	
Earnings from Freight.....	\$131,920 34
Earnings from Passengers.....	90,531 76
Earnings from Miscellaneous.....	5,351 06
Total.....	\$217,803 16
Operating expenses.....	\$241,270 05
Loss surplus fuel pur'd.....	32,720 98
	208,549 07
Net earnings for first quarter of 1887.....	\$9,254 09
Gain in net earnings for first quarter of 1888.....	\$37,507 62

SILVER ORES OF ARIZONA.

The following is the report of the Committee on Minerals and Mining Apparatus, on a case of specimens of the Silver ores of Arizona, exhibited by Wrightson & Co., at the late Annual Fair of the Ohio Mechanics Institute, held in Cincinnati during the months of September and October, 1887.

No. 458. Specimens of silver, copper and lead ores, contributed from its mines in Arizona, Donna Anna county, by the Sonora Exploring and Mining Company. Although this case was not presented in time for competition or award, yet, from the variety and richness of the ores, the high promise which the mines of this recently-acquired territory give, and especially the fact that it is exclusively a Cincinnati enterprise, it deserves more than a mere passing notice; and as mining is now occupying the attention of our people to a considerable extent, we propose in this connection to furnish the reader with a brief account of some of the districts in which silver ores are found, some statistics illustrating the value of these ores, and the fact that it is a legitimate field for American enterprise.

The possessions of the Sonora Exploring and Mining Company constitute a portion of the "Gadsden Purchase." The headquarters of the company are at the old mining town of Tubac, thirty-two degrees N. lat., and on the line of the Pacific Railroad. Most of the silver mines now in active operation on this continent are far south of this locality; but it will be seen by reference to authentic works, that the richness of the ores increase toward the north, and if the assays of a number of gentlemen of character may be relied on, the ores in the Gadsden Purchase give a larger per cent. of silver than any heretofore discovered in North or South America. Ward, in his work on Mexico, published in 1827, says: "The metals seem to increase in richness as you approach the north; in so much that in the Real, or District of Jesus Maria, in that great branch of the Sierra Madre which separate the States of Durango and Chihuahua from those of Sonora and Sinaloa, to the north and west, the ores of the mine of Santa Juliana (which does not exceed seventy yards in depth) appear, by a certified report from the Diputación de Minería, now before me, to average seven and eight marcs of silver per carga, of 300 lbs., which is the average produce of ten cargas of good ore in Guanajuato; while ores of the best quality yield as much as from four to ten marcs per arroba, of 25 lbs., or forty marcs per carga." Vol. 11, p. 227. From this it would seem, that the Gadsden Purchase promises to be one of our richest acquisitions, and one in which American labor may reap rich rewards.

The Sonora Company, as appears by their report, in 1856 sent out an engineer and geologist, who succeeded in purchasing 20,000 acres of land, upon which were some *eighty veins of silver*, and some *thirty old mines*. These mines have not been worked since the celebrated "Mexican Apache war."

Baron Humboldt states, that up to 1803, \$1,767,952,000 had been raised from the mines of Mexico. When it is remembered that this immense yield was gained with the crude implements, without skill, without machinery, the only way often of draining the mines was, by having the water carried, by natives, up notched logs, hundreds of feet, it will be at once apparent what may be accomplished should American energy and enterprise be applied in a field of such richness.

The following varieties of silver ore were presented:

1. Sulphuret of Silver.
2. Antimoniated Sulphuret of Silver.
3. Chloride of Silver.
4. Argentiferous Galena—Sulphuret of Lead.

The analysis of but one of the ores of silver, the sulphuret, was shown the committee. The assay of different gentlemen of character is herewith presented:

	Grains	Value	Value per ton of 2,000 lbs.
	per lb.	per lb.	Av.
Assay by Prof. Booth.....	247.80	\$0 67	\$1,342.00
" " ".....	87.64	0 23	475.60
" " Prof. Torrey.....	51.99	0 16	322.94
" " Locke.....	79.10	0 21	428.46
" " E. Kinsey.....	239.40	0 64 43	1,296.60
" " ".....	535.00	1 42 18	2,843.50
" " Mining Engineers at Tubac.....	345.33	0 93	1,870.40
" " ".....	520.00	1 40	2,816.60
Total, 8 assays.....	2,095.26	\$5 69 13	\$11,395.60
Average.....	262.03	0 71 14	1,424.45

Lead ores, of which No. 4 is a specimen, are found in large quantities in Sonora. These ores may be of very great value as fluxes in the smelting of silver. Some of them have been analyzed, and yield silver as follows:

	Grains	Value	Value per ton of 2,000 lbs.
	per lb.	per lb.	Av.
Longorenia Mine.....	18 11 48	\$0 04 43	100
Amarillo Mine.....	10 94 100	0 02 98	100
Arenita Mine.....	14 58 100	0 03 95	100
Average.....		\$0 03 95	100
Average of above silver ore.....			1,424.45

Average yield, per ton, of silver ore and flux.....\$1,503.51

In addition to the above, a portion of these silver ores contain also, according to Prof. Torrey, of the United States Mint, 33 per cent. of copper—a per cent. which would render the working of them for copper, alone, a profitable business. Many of the veins of silver in the territory now belonging to the United States, can be worked by *drifts*, instead of *shafts*. This will render mining much less expensive, as the draining will be cheapened and very greatly facilitated. Shafts, in some of the Mexican mines, have been sunk to the depth of from 1,000 to 2,000 feet, and although the ore and water are carried up on the backs of natives, yet the immense fortunes of Mexico have been thus accumulated.

A comparison between the ores of Sonora, those from the mines of Southern Mexico, and the quartz mining of California, results largely in favor of the former. The statistics for the Mexican mines are gathered from the works of Ward and Humboldt; those for quartz mining are taken from the *Steamer Bulletin*, San Francisco, of August 5th 1857, being an average of twenty-four lots of quartz, taken from "leads" near Gross Valley, Nevada county.

Average of Mexican Silver Mines, per ton.....	\$65.00
" " California Quartz Mines.....	68.57
" " Silver, per ton, in Lead Mines of Sonora	
Exploring and Mining Co.....	79.96
" " Silver, per ton, in Silver Mines of Sonora	
Exploring and Mining Co.....	\$1,424.45

It is estimated that one laborer can produce, at the Heintzelman mine, in one week, 300 lbs; fifty laborers, in fifty weeks, 750,000 lbs; which according to some of the assayers, would yield more than a half million dollars worth of pure metal. This estimate may seem almost fabulous, but when we reflect upon the millions which have been realized by the Mexicans, and this too from inferior ores, and with the most rude and inefficient manner of smelting, the estimate, if the assays are reliable, can not be regarded as extravagant.

Before closing our report, we propose furnishing a short account of silver mining, its condition and prospects in Honduras. Honduras, although a foreign State, yet presents many inducements for our industries and skillful men. In addition to its mineral wealth, its soil is admirably adapted to agricultural pursuits, while its climate is agreeable and healthy. Its elevation above the sea exceeds 4,000 feet, which secures for it a range of thermometer much below many localities in the same latitude. The government and people are anxious for Americans and English to emigrate to their country. A wealthy gentleman said to a traveler who was visiting Honduras, "Oh, if your countrymen, the Americanos del Norte, that great and happy people, would but come here and renew those good old times, how rich and happy we should become." A gentleman who visited Honduras in 1856, furnished an exceedingly interesting paper on her climate, soil, mines, etc., for *Harper's Magazine*, to which we have been indebted for much of our knowledge on these subjects. Upon the amount of silver ore, this author remarks: "There is no doubt that a network of silver penetrates all the mountains of this district. It will always be impossible to estimate the amount of silver in

these hills, but it is not saying much to affirm that the present waste and wear of silver, in the arts and commerce, might be readily supplied from them." Senor Lozano, an old man who has spent his whole life in Honduras, makes the following remarks in reference to the department of Tegucigalpa: "Here is coin for the world; forty good mines which are known to be rich, and which have already yielded great sums with little labor. Veins, as yet unopened, intersect every mountain, from base to summit. I have marked out the *minerales* (mining districts) for you thus. Each has its group of mines. Many are already drained, and require but a small outlay to be made productive. We offer great riches to your countrymen."

The silver ore of Honduras is found imbedded in the same kind of rock as is the gold of California, the cinnabar and lead of Mexico. The causes which have thus brought these metals to, or near the surface, have been wide-spread; in truth they belong to the vast forces which elevated the grand chain of mountains which reaches from one extremity of our hemisphere to the other. These metals were thrown up in a fluid state, hence they are found in the cracks and fissures which usually abound in primitive rocks. Upon the continuance of these veins this remark is made: "Silver mines in this region never give out; they vary in width, but are infinitely continued. Their supply is inexhaustible."

Copper, lead, and quicksilver exist also, in large quantities. The former two have not been mined, as the reduction of silver ores was much more profitable, while although the latter are of first importance in forming amalgams in the process of extracting silver, yet, "the mines of cinnabar (the sulphuret of quicksilver) though near at hand, are not worked for want of knowledge."

Rudeness and inefficiency characterize every thing pertaining to silver-mining in Honduras, from the digging of the ore down through every process until the pure metal is obtained. At some mines the ore is pulverized by Indians, by pounding in between two large-sized stones, but "the best organized works employ rude machinery for pounding, which consists of two irregular millstones, dragged around, in a circular stone water-trough, by mules, or oxen, pulling at a long beam, which turns on a centre-post, like old-fashioned cider-mills." A good crushing-machine, such as is used by quartz-miners, will do more than *fifty times* the work of one of these rumbling old mills, and with as little cost.

A large proportion of the native miners are frequently out of employ; they frequent the scenes of former operations, and by a homely process of smelting in earthen pots, obtain comparatively pure silver. Here and there a wandering Indian with his family are found near some deserted mine, who, by a rude process, is enabled to obtain silver enough to buy all he needs.

"More than \$2,000,000, it is said, have been netted since it was opened, long previous to the Revolution, from the San Martin mines." Upon the richness of the ore, the author from which we quote remarks—"it yields \$200 and even \$300 to the ton, when treated by American chemists; but the workmen of Senor Ferrari, the proprietor, do not realize half that amount from it."

The celebrated Mina Grande has a vein 33 feet in thickness. This mine belonged to the wealthy family of Rosas, who were driven from the country during the Revolution, on account of their tyranny. It had yielded them more than a million of dollars.

The Gatal mine, which originally yielded largely, has now but ten men employed. This force raises daily half a ton of ore, from which 100 ounces of silver are taken.

"Las Minas de la Plata, San Juan de Canteranos, La Mineral de Guscarran, where there is a mine now in operation yielding silver; La Mineral de Plomo, where, in any part of the district, ten or twelve feet of digging uncovers flat layers of argentiferous ores conforming to the strata; Villa Nueva; Santa Lucia, with its six grand mines, in a circle of less than twelve miles diameter; Yuscarran, with nine valuable mines, all well situated and drained, and from one of which, the Guayavilla, \$500,000 were taken in four months, during President Ferrara's administration; Cedros, on the road to Olancho, where the silver is in pure threads; San Antonio, where there are vast horizontal layers of ore, yielding native silver, only a few yards beneath the surface, where \$16,000 were taken out from Senor Gardela's mine (the Veta Azul), in ten days, and where the Mairina mine, in the years 1804—1808, yielded an immense fortune to its proprietors;—all these *minerales* lie open to the enterprise of Americans, who have the good-will of the government and proprietors, to introduce machinery and the best methods of extracting the ore."

According to this writer, what is most needed in Honduras—and the same is true of all the mining districts of our continent—is, first, machinery to draw the ore from the mine; secondly, mills to crush it to a fine powder; and, finally, a skillful metallurgy, by which every grain of silver may be obtained. Speaking of the loss at the San Martin mine, he says—"The *Major-doma* appeared to be fully aware of the great loss incurred by the inferior processes in use in Honduras. 'We work in the dark here, Sir,' he exclaimed; 'no intelligence, no workmen, no funds, nothing, absolutely nothing, Sir; we lose half of the silver, because we are ignorant of the means of extracting it.'"

We have thus presented a few facts for the benefit of those who read your report. We have been assured that the first successful Quartz Mining Company originated in Cincinnati; and it would seem, from the energy manifested by the managers of this Sonora Exploring and Mining Co., that to our city may belong the credit of leading the way to the development of the vast resources which exist in the territory acquired by our government, under the "Gadsden Purchase." To mechanics and laborious men generally, such countries as Sonora and Honduras present prospects of the most encouraging character. These valuable regions, which Mexican inefficiency has allowed to remain unproductive, are destined under the genius and enterprise of Americans, to furnish yields hitherto unknown.

Respectfully,

W. W. DAWSON.

BEAUFUME'S GAS-FLAME FURNACE.

M. Guesnet, Admiralty Engineer, and M. Sochet, Director of Naval Construction, both of Cherbourg, France, have made a report upon a gas-flame furnace, the invention of M. Beaufume, from which we condense the following information:

In accordance with an agreement dated 23d February, 1856, M. Beaufume delivered at the port of Cherbourg a heating apparatus constructed according to his new system. This apparatus has been applied to the boiler of the Northern Forge at that port, where experiments were made with it.

Instead of burning the fuel directly below the boiler, M. Beaufume first transforms it into gas in a separate apparatus; and then conveys this gas to the boiler, where its complete combustion causes the generation of the steam. This separate apparatus, which M. Beaufume terms a gasifier, consists of a furnace constructed very like that of a locomotive, with a water space substituted for the tube plate. Coal is heaped upon the fire bars to a considerable height; say 20 to 23 inches, according to the quality of the coal. The air necessary for the gasification is supplied in suitable quantities below the fire bars, by means of a blowing fan. The oxygen of the air supplied causes very active combustion amongst the lower layers of coal in contact with the fire bars, converting the coal into carbonic acid gas; and this gas in passing through and amongst the upper layers, which ought always to remain black, becomes converted into carbonic oxide, and accumulates in the upper part of the furnace mixed with nitrogen, and doubtless hydrogen also. These gases, the temperature of which is but slightly elevated, are conducted to the boiler through a wrought iron pipe, and enter the boiler furnace after having been thoroughly mixed, in a chamber termed the burner, with a suitable proportion of air supplied by the blowing fan. After having been once ignited in the boiler furnace, the gases continue to burn as fast as they are supplied. The flames produced act on the heating surface of the boiler; and the gases remaining after combustion pass through the flues and escape into the atmosphere under the pressure due to the blowing fan, no chimney being required.

The gasifier, in consequence of the water-space with which it is surrounded, is itself a small boiler, the water in it absorbing the heat developed in the gasifying process, and utilizing it by forming a considerable quantity of steam, which is added to that of the large boiler. The furnace of the gasifier is supplied with fuel through a passage in the top of the apparatus, this passage crossing the steam space and opening into the furnace, whilst it is fitted with doors or valves at both extremities, so that the fuel can be introduced into the furnaces without opening a communication with the atmosphere.

A few simple and inexpensive alterations require to be made in the brickwork setting of ordinary boilers, in order to adopt them for being heated by gas. The fire bars being removed, a brickwork platform is constructed in their place, and on this platform a number of brickwork passages are formed, with openings arranged to allow a portion of the ignited gases to come directly into contact with the boiler surface. These passages are quite indispensable, and form what may be called a heat-regulator. They heat the gases, which, arriving in too cold a state, would not be com-

pletely burnt did they not come in contact with highly heated surfaces before being ignited.

The boiler of the forge is of 12 horse power; it has a total heating surface of 167½ square feet, and when arranged in the ordinary way, it has a grate surface of 12¼ square feet.

The gasifier supplied by M. Beaufume has a grate surface of 5¼ square feet, a depth of fuel of 27½ inches can be placed in it. The total height of the apparatus, including ashpan, &c., is 11½ feet; and, taking extreme external measurements, the space occupied amounts to 290 cubic feet. To place the apparatus, and to allow sufficient room for attending to it, a space measuring at least 10 feet by 6½ feet is required, without including that taken up by the blowing fan and the donkey engine which drives it. The cylinder of the donkey engine is 3.9 inches diameter, and the stroke 7.9 inches; whilst the maximum speed is 170 revolutions per minute, with a pressure of five atmospheres, the blowing fan being made to turn at the rate of 1000 revolutions per minute, by a belt and pulley. The blowing fan is 2 feet in diameter by 1 foot in width, and the pressure of the blast produced when the fan makes 1000 revolutions per minute, is equal to a column of water 1.97 inches high.

The Beaufume apparatus requires more attention, and gives perhaps a little more trouble than an ordinary boiler; still an ordinary fireman is quite capable of attending to it.

When the boiler and gasifier are cold, that is, when the fire has been extinguished for more than twelve hours, it requires considerably more time to get up the steam than with the ordinary furnace—about 25 minutes. At the same time, when the fire in the gasifier can be kept in during the intervals between working hours, as M. Beaufume proposes, this inconvenience does not exist.

The Beaufume apparatus has also another inconvenience, which is felt every time the fuel is stirred. This operation necessitates the opening of small apertures for the introduction of the poker, permitting large quantities of carbonic oxide to escape, the presence of which in the boiler-house is injurious to the fireman, unless the atmosphere is renewed with sufficient rapidity.

Finally, there are minute explosions which take place on igniting the gases in the boiler furnace, when the precaution is not taken of shutting off the supply of air until the moment when the light is applied, and when in consequence the furnace and flues are filled with carbonic oxide mixed with air. There is, however, not the slightest danger attending these explosions.

In order to obtain a standard for comparison, preliminary experiments were made with the boiler heated by the ordinary furnace, to ascertain what quantity of steam per pound of coal could be raised under these circumstances. The brickwork was in rather a bad condition, and only 4.85 lbs. of water were converted into steam of a pressure of five atmospheres per lb. of Newcastle coal.

When employing the same coal, on applying the Beaufume apparatus, the quantity of water converted into steam of a pressure of five atmospheres per pound of coal, which was increased at each experiment in consequence of repeated improvements in the working of the apparatus, finally reached 8.26 lbs. This shows that the Beaufume apparatus realizes a saving in fuel of 41 per cent. in the

production of a given amount of steam. It is, however, necessary to make a deduction for the steam used by the donkey engine driving the blowing fan, which reduces it to about 7.8 lbs., a result which still shows a saving of 38 per cent.

In these two series of experiments the production of steam was estimated by the quantity of feed water used—doubtless a very imperfect method—but the only one at command.

During the whole of the experiments with the apparatus, the consumption of smoke was complete, a very light smoke only being seen to issue from the chimney when the fuel was stirred, caused by the temporary production of an excess of gas compared with the air supplied. This smoke was almost imperceptible, and moreover lasted but for an instant.

During this series of experiments it was ascertained that the temperature of the residuary gases on leaving the flues was still sufficiently high to melt zinc; there was, therefore, undoubtedly, a considerable loss of heat, as these gases should not have had a temperature of more than 150 deg. Centigrade, (302 deg. Fahr.) This arose in consequence of the heating surface being insufficient.

Further experiments were made with the Beaufume apparatus, but with other than Newcastle coals, in all cases giving very advantageous results.—*London Mechanics' Magazine.*

MONETARY AND COMMERCIAL.

As noticed in our last, the payments of the 15th and 16th created an active demand for money during the early days of the week. The extent of these payments rendered the fluctuations in the amount of currency held by the banks very decided. The great amounts of these, as compared with the usual amounts of such fluctuations, has rendered the discount houses a little more careful in putting funds out of their hands. During the latter days of the week discounts are easier, and we quote rates at regular houses at 10 to 12 per cent. Outside from 12 to 18 per cent.

General business has been pretty fair. Navigation is good.

Eastern Exchange is in fair demand, and rates are tending toward greater firmness. We quote New York at ¼ buying to 5-8 and ¼ selling.

Stocks here are not active. Prices, however, are better.

Advices from New York notice an abundant supply of capital, and terms favoring borrowers. The New York Courier says:

The abundance of money exceeds that of any year since the Mexican War. The Banks are seeking good paper for discount, and the business of the city has been so sensibly curtailed within the past six months, that business paper of an acceptable character has become very scarce. A sale of U. S. Six per Cents of 1867 was made to-day at 115. State Loans are unusually steady, and more firmly held. Tennessee Six per Cents sold to-day at 8½. Iowa Sevens 106. Missouri Sixes 89½. Ohio sixes of 1875 at 104. Indiana State Sixes 83½. The Stock Market is in better condition to-day, showing a slight advance on yesterday's prices. The time sales were unusually large in Erie R. R. Shares at 23½ a 23½. Compared with closing sales of yesterday we note an advance in Reading, Cleveland and Toledo, Illinois Central Shares, Chicago and Rock Island 7-8, Milwaukee and Mississippi, Cumberland Coal ¼, Delaware & Hudson Canal Shares 1.

SALES AT THE NEW YORK STOCK BOARD—April 19.

\$1,000 Ohio State 6's, '75.....	101
2,000 Tenn. State 6's, '90.....	88½
3,000 Miss. 6's.....	89½
6,000 Cal. 7's.....	83
8,000 Erie B'ds, '75.....	49
6,000 Hud. 1st Mt. B.....	99½
3,000 Harlem Ist Mt. Bonds.....	83
2,000 Reading Bonds, '66.....	66
19,500 Illinois Central R. R. Bonds.....	88
10,000 La C. & Mil. G. B's.....	71½
200 Shares New York Central.....	87½
420 " Erie R. R.....	24
450 " Hud. River R. R.....	29
500 " Harlem R. R.....	19
500 " Reading.....	55½
100 " Mich. S. & N. Ind.....	23½

The earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Co. for the month of March were as follows, viz.:

From Freight.....	\$69,535 91
Passengers.....	60,628 02
Mail.....	4,482 29
Rent of Road.....	5,360 00
Miscellaneous.....	173 69
Total.....	\$149,319 91
Earnings for same month last year.....	165,491 65

Decrease (9 7-10 per cent.)..... \$16,171 74
The expenses for March were as follows, viz.:

Station expenses.....	\$ 6,760 97
Cost of running.....	21,044 86
General expenses.....	7,060 51
Repairs of Machinery.....	16,917 13
Track and Roadway.....	15,148 17
Structures.....	1,768 96
Total.....	\$ 66,719 16
Expenses for same month last year.....	79,661 64

Decrease (16 5-10 per cent.)..... \$12,942 48

Net earnings for March, 1857.....	\$45,830 01
Net earnings for March, 1858.....	82,600 03
Decrease.....	\$ 3,229 98

The receipts of the North Missouri Railroad for March, were:

	1857.	1858.
Freight.....	\$1,974 35	\$5,246 55
Passenger.....	2,294 10	6,978 40
Total.....	\$3,565 35	\$12,234 64
Excess for March, 1858.....		\$ 8,666 60

WOODRUFF'S PATENT SLEEPING CAR,

AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

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G. R. DYKEMAN, Alton, Ill.
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

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Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and in all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—'y

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by
Feb. 1858.
Mar. 25, 1858.

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Terre Haute, Lafayette, Chicago,

AND THE NORTH-WEST.



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Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

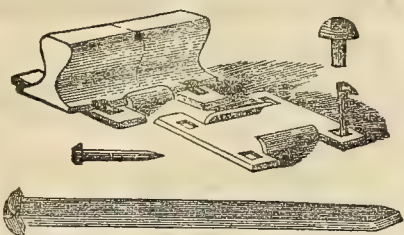
Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

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Please direct name in full.

Feb 28

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Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

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IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [Jan 1-15] Agent.

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Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

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1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

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NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

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D. M. CARHART.

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THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

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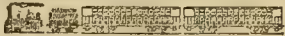
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ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,
LOCOMOTIVES OF SUPERIOR QUALITY.
 Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.
 Jy. 27. RICHARD NORRIS & SON.

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PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails. It can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—
 JAMES H. MORLEY, New York City.
 Or SUMNER SMALL, Boston, Mass.
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RHINELANDER, BOORMAN & CO.,
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Supply all material and articles used in the construction and operating of railways

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Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.
 feb5-ly

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858,

For the Grubbing, Grading, Masonry, Bridging and Cross Ties, for the First Division of the Cincinnati and Mackinaw Railway, from Greenville to Cella, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.
 H. A. FRINK,
 Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.
 March 18—2t.

IRON BOILER FLUES PASCAL IRON WORKS.

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 Manufacturers of

LAP-WELDED BOILER FLUES,
 7 to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
 From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc
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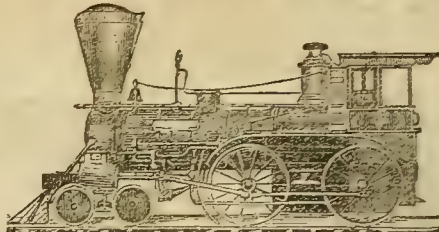
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4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

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Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,
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COTTON DUCK FOR CAR COVERS,
Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

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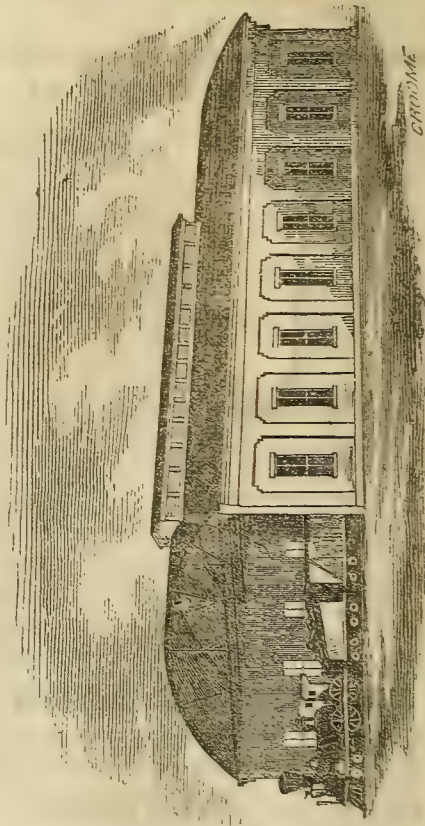
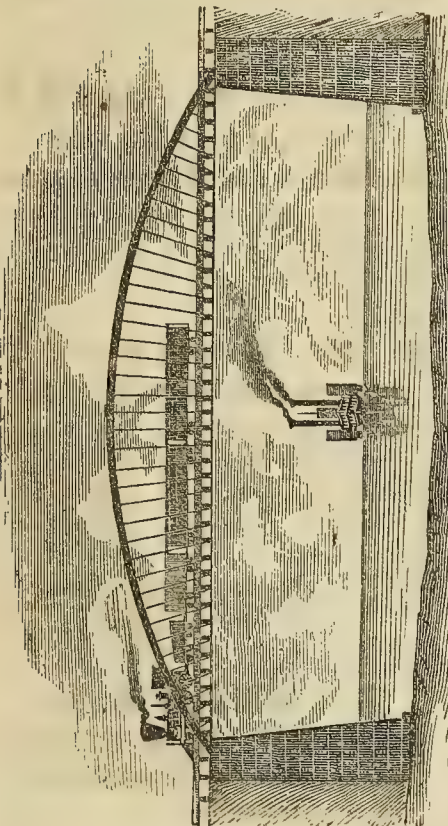
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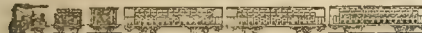
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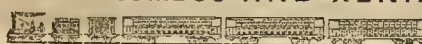
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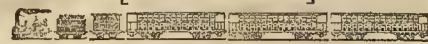
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LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:30 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

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Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

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HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

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DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects a Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

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FOR CHICAGO.

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Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:15, 6:55 and 10:15 P. M.

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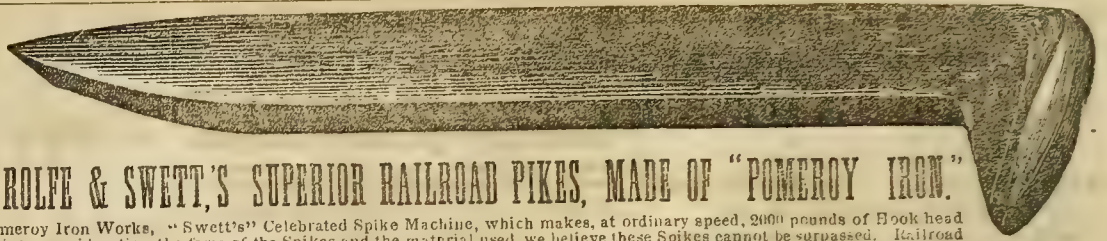
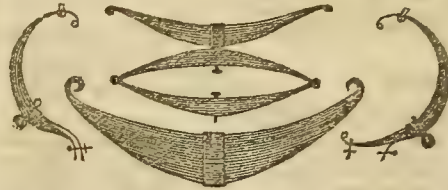
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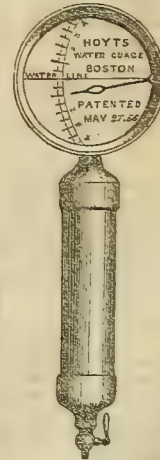
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Railroad Record.

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W. WRIGHTSON, - - - }

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Railroad Record

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THE ALBANY EVENING JOURNAL.

We perceive by the newspaper reports that Thurlow Weed, Esq., has again assumed the position of chief editor of the above paper. It is seldom that persons who have once enjoyed the amount of popular favor that has been bestowed on Mr. Weed, after being forced to retire from public life, can again successfully compete with the more vigorous efforts of younger men. Mr. Weed is a veteran, and is possessed of superior talents as a paragraph writer, and it may be that his case will prove an exception to the above rule.

The La Crosse Democrat says that about five hundred men have been set to work on the La Crosse Road west of the tunnel, and that by September the tunnel will be completed. Five feet a day is opened, and ten feet will soon be accomplished per day.

THE PHYSICAL DEVELOPMENT OF THE U. STATES—LAWS OF POPULATION.

This subject could be comprehended only in volume; but, we shall touch here merely the development of population. This point has often been discussed, and there are several controverted points. One of them is—how far the growth of population has been due to immigration? Mr. Sadler, of England, in a treatise on population, contended, and with great justness, that a large part of the growth of population here was due, not to natural increase, but to continued migration from Europe. This is unquestionably true. The growth of population here has been counted, at the average rate of 33 per cent. each decennial period, or 3.3 annually. But, the natural increase does not exceed 25 per cent. decennially, or 2.5 per annum. This is about two-thirds what it seems to be. Not only the foreign born, but the descendants of foreign born are to be counted in, at each specific period, in order to ascertain clearly the natural increase of the original element. A more interesting problem than this, however, is—how long will the growth of the United States continue at either of these rates? Assume 25 per cent. as the decennial ratio, and twenty millions (20,000,000) as a basis of calculation, what would be the result in one hundred years? Thirty years would give us 46,875,000. Sixty years will give us 76,000,000, and one hundred years will produce 185,000,000!

But, in fact, the growth of the United States is far greater than this. Between 1840 and 1850 the growth was 35 per cent., or 3.5 per annum. At this very moment the annual increment is 700,000. We increase 15,000 per week, notwithstanding the heavy mortality which is continually diminishing the population. Birth and immigration are rapidly bringing new life among us. The curious fact, in regard to this, is that for more than half a century, the law of population in this country has remained very nearly the same. This indicates, that notwithstanding immigration modifies this law, to some extent, yet there is, even without immigration, a recuperative and natural law of increase, which, in the absence of immigration, would very nearly produce the same effect.

The decennial ratios of increase have been as follows:

From 1790 to 1800.....	33½ per cent.
" 1800 to 1810.....	36 " "
" 1810 to 1820.....	33½ " "
" 1820 to 1830.....	33½ " "
" 1830 to 1840.....	33 " "
" 1840 to 1850.....	35 " "

The variation in these ratios are so slight, as to indicate, as we have said, a fixed law. This law is an increase of about one-third in each period of ten years.

More than thirty years ago, Mr. Darby, the Geographer, made an estimate of the population of the United States, for the next hundred years, based on the now existing ratios.

It proved to be a little in advance of the reality, but not so much so, as not to excite surprise by its accuracy. His chief error was in the negro race, whose relative increase he greatly overrated. Here are his aggregates for fifty years, as compared with the real and probable results:

	Darby's View.	Reality.
In 1830.....	14,043,000	13,866,000
In 1840.....	19,335,000	17,070,000
In 1850.....	26,168,000	23,190,000
In 1860.....	35,160,000	20,900,000
In 1870.....	47,360,000	42,000,000
In 1880.....	63,660,000	56,000,000

By either calculation the population of 1930 will be 250,000,000. Mr. Darby very greatly over-rated the growth of the negro population, which fact, perhaps, shows the great influence of immigration as much as any illustration, since the whites only increase from that source. It will be interesting to contrast Mr. Darby's view of the growth of the African race here with the reality:

	Darby's View.	Actual Law.
In 1830.....	2,693,731	2,330,000
In 1840.....	4,114,000	2,875,000
In 1850.....	5,736,000	3,938,000
In 1860.....	7,560,000	4,500,000
In 1870.....	10,669,000	6,630,000
In 1880.....	14,339,000	7,930,000

It will be seen that the negro population of the Union will not, in all probability, be more than half of Darby's estimate. This arises from his not having taken into view the difference between the ratio of increase in the colored and white population. The increase decennially of the colored population is only 24 per cent., while the increase of the whites is 33. The 11 per cent. difference is due to the influence of immigration chiefly, though not altogether. In seventy years the United States will contain more than twenty millions of negroes! This fact is appalling enough, without supposing, as Mr. Darby did, double that number.

If we suppose the law of population to continue what it is for fifty years, then diminish to 25 per cent., and remain so for one hundred years more, we shall have this result:

In 1850.....	23,000,000
In 1860.....	26,000,000
In 1870.....	40,800,000
In 1880.....	54,000,000
In 1890.....	73,000,000
In 1900.....	95,000,000
In 1910.....	120,000,000
In 1920.....	160,000,000

Is this result impossible, or even improbable! The number of square miles in the United States is near three millions. With six hundred and forty millions of people, the density of population would be about 214 per square mile. The density of Belgium, Holland and England is greater than that. The density of Great Britain and Ireland is about 225 per square mile, which is about the fair ratio for a country in high civilization, and with a diversified soil. Considering the advanced state of civilization and the practical arts in the United States, and the temperate climate and various soil, there is no reason why this country should not attain six hun-

dred millions of inhabitants in the course of one hundred and fifty years.

The Black population will attain *twelve millions* in 1900, or a little more than fifty years from this. If, as is now almost certain, they are confined—at least nine-tenths of them—to the region south of the Tennessee and east of the Rio Grande—even should the West Indies be included—they will occupy only ten or a dozen States, and make, of themselves, a *density of negro population* equal to the density of Massachusetts now, or 120 per square mile. The idea of such an accumulated mass of negroes in any part of the United States, is calculated to startle the imagination. We state simply the fact, or, at least, the probability of the fact, as an interesting subject of reflection to a philosophical mind.

In the estimate of population for the United States, in a period of 150 years, it is probable we have rather underrated what is likely to be true; for, it is easier to support a million of persons on a given quantity of ground now, than it was half a million a century since. Agriculture improved, and commerce facilities have made this difference, and is likely to make more. Society moves on in a channel which seems greatly to increase both the social and intellectual growth of man.

(Correspondence of Railroad Record.)

THE INTRODUCTION OF CAMELS INTO THE UNITED STATES.

Origination of the Measure; patronized with enlightened zeal by the present Secretary of War—will prove of the utmost utility in developing the resources of Arizona, and another large portion of New Mexico, if the measure is followed up by the continued favor of the Government—further remarks.

Col. Jefferson Davis was the author of the introduction of camels into the United States. He introduced a resolution, in 1850, into the Senate for the adoption of this measure—subsequently appointed in 1853 Secretary of War, he recommended an appropriation in December, 1853. The following is an extract from his report of December 1, 1853. See Vol. 2d Senate Documents—No. I, p. 25. He said:

"On the older continents, in regions reaching from the torrid to the frigid zone, embracing arid plains and precipitous mountains covered with snow, camels are used with the best results. They are the means of communication and transportation in the immense commercial intercourse with Central Asia. From the mountains of Circassia to the plains of India, they have been used for various military purposes—to transmit despatches, to transport supplies, to draw ordnance, and as a substitute for dragoon horses.

"Napoleon, when in Egypt, used, with marked success, the dromedary—a fleet variety of the same animal—in subduing the Arabs, whose habits and country were very

similar to those of the mounted Indians of our western plains.

"For like military purposes, for expresses, and for reconnoissances, it is believed the dromedary would supply a want now seriously felt in the service; and for transportation, with troops rapidly moving across the country, the camel, it is believed, would remove an obstacle which now serves greatly to diminish the value and efficiency of our troops on the western frontier.

"For these considerations it is respectfully submitted, that the necessary provision be made for the introduction of a sufficient number of both varieties of this animal, to test its value and adaptation to our country and our service."

In pursuance of this recommendation, and a repetition of it in the Secretary's Report of December 4, 1854, the following appropriation was made in the army appropriation act of March 3, 1855:

"SECTION 4. *And be it further enacted*, That the sum of thirty thousand dollars be, and the same is hereby appropriated, to be expended under the direction of the War Department, in the purchase and importation of camels and dromedaries, to be employed for military purposes."

The secretary proceeded to make effectual this appropriation by the selection of suitable officers to carry it into effect. Major H. C. Wayne, of the army, and Lieutenant David D. Porter, of the navy, were selected for this purpose; and the "Supply," a vessel pretty well adapted to the transportation of the camels, was put at his disposal. The only objection to this vessel was that the space between her decks did not admit the transportation of very large animals; hence only one "Tulor" was brought over—a matter of but little importance in the first experiment, these animals being hybrids, and their offspring greatly inferior.

Major Wayne and Lieut. Porter reached Constantinople in the latter part of September or early in October, 1855. Major Wayne, October 5, 1855, gives this account, with the accompanying remarks, of some camels which they then had on board:

"They consume, each, from eighth to twelve pounds of hay, and six quarts of oats per day, and drink once in three days, absorbing at the draught, on an average, (for sometimes they will not drink at all, and at others they drink excessively,) from two and a half to three buckets of water. The camel is, undoubtedly, a hardy animal, and the diseases it is afflicted with, especially the itch, are most frequently produced, I should say, by hard treatment, and by the filthy state of its skin, no care by currying, brushing, or other cleaning, being taken of its hide. Patient and humble in its character, it meets with the neglect and oppression usually visited upon meekness.

"Americans will be able to manage camels

not only as well but better than Arabs, as they will do it with far more humanity and with far greater intelligence.

"I will add, that observation so far of the the animals of the country and of the climate, confirms my opinion of the advantages to be derived from its introduction into the United States, and of the feasibility of acclimating and domesticating it there, and that the only difficulty in the experiment is that of transportation across the sea."

The opinions and expectations of those very able officers, Major Wayne and Lieut. D. D. Porter, have, so far, been entirely realized; and it is to be hoped that Congress will now make another appropriation to bring an additional number to the United States.

The camel will go eighth, sometimes nine days without water. In winter and spring, it does not drink so often as in summer and early autumn.

In a good article in Harper's Magazine on the camel, entitled "The Ship of the Desert," we have the following account of it:

"He eats as he goes; stretching his long neck from side to side of the road, he browses on the herbage within his reach, and being a light sleeper, seldom requiring more than four hours of rest out of the twenty-four, he ruminates the greater part of the night, or during the noon halts of the caravan."

The trip of Lieut. Beale proves the special adaptation of the camel to Arizona, and another portion of southern New Mexico. In Arizona, where, for considerable distances, animal transportation must be used, the Mining Company which is there prosecuting its work with so much success within the limit of its means, would find it a most valuable substitute for any other kind of animal transportation. The desert there is no where half so frightful as that from Darfour, in central Africa, into Egypt, in which an immense caravan of six hundred merchants, four thousand slaves, and six thousand camels, every two years performs long and generally prosperous journeys. Many of these camels perish, but it is, probably, owing much more to the inhumanity of the drivers than to the perils of the way, insurmountable as they would be to any other animal. Indeed, in such a country as Arizona and other parts of southern New Mexico, the camel would be peculiarly serviceable. And in the great plains stretching from two hundred miles west of Kansas River to the Rocky Mountains, and from the fortieth degree of north latitude to near the thirty-fifth, in which rain falls in but very moderate quantities—the camel would be an invaluable accession to the means of transportation. The present Secretary of War has shown an enlightened zeal in the prosecution of the experiment by having a trial made on part of the Territory of Arizona and southern New Mexico, of the capacities of the camel for bearing burdens and for travel. Mr. Beale's Reports are in high degree satisfactory, and no reason can be discovered why his recommendation of further importations of this most valuable animal should not be made.

We will further discuss the subject.

W. A.

RAILROADS OF THE UNITED STATES.

OHIO.

Names of Companies.	Termini.	Length in Ohio.	Not in Ohio.	Finish- ed in Ohio.	Un- fin- ished.	Capital.	Debt.	Total Cost.
Bellefontaine & Indiana R. R.,	Union, Galion,	118	—	118		\$	\$	\$
Central Ohio,	Columbus, Bellaire,	137	—	137				
Cincinnati and Chicago,	Richmond, Anderson, Ind.,	—	108	—				
Cincinnati, Hamilton & Dayton,	Cincinnati, Dayton,	60	—	60		2,155,800 00	1,427,000 00	2,624,442 86
Cincinnati, Wilmington & Zanesville,	Morrow, Zanesville,	131	—	131				
Cleveland & Mahoning,	Cleveland, Newcastle,	87	—	87				
Cleveland & Erie,	Cleveland, Erie,	70	25	70				
Cleveland & Pittsburg Main Line,	Cleveland, Rochester,	123	—	123				
" " River Line,	Yellow Creek, Bellaire,	43	—	43				
" " Carrollton Branch,	Oneida, Carrollton,	11½	—	11½				
" " Hanover Branch,	" "	1½	—	1½				
" " Tuscarawas Ex'sion,	Bayard, New Philadelphia,	32	—	32				
Cleveland & Toledo, Northern Division,	Cleveland, Toledo,	109	—	109				
" " Southern Division,	Grafton, Clay Junction,	79	—	79				
Cleveland, Columbus & Cincinnati,	Cleveland, Columbus,	135	—	135		4,746,220 00	90,000 00	4,746,220 00
Cleveland, Zanesville & Cincinnati,	Hudson, Millersburg,	61	—	61				
Columbus & Xenia,	Columbus & Xenia,	55	—	55				
Columbus, Piqua & Indiana Railroad,	Columbus, Union,	103	—	103				
Dayton & Michigan,	Dayton, Toledo,	140	—	40	100			
Dayton & Western Railroad,	Dayton, Richmond,	40	—	40				
Dayton, Xenia & Belpre,	Dayton, Xenia,	15	—	15				
Eaton & Hamilton,	Hamilton, Richmond,	36	6	36		469,760 00	960,818 00	1,430,580 00
Greenville & Miami,	Dayton, Union,	47	—	47				
Iron,	Ironton, Centre Station,	13	—	13				
Little Miami,	Cincinnati and Springfield,	84	—	84		3,000,000 00	1,226,000 00	3,925,157 30
*Mad River & Lake Erie,	Sandusky, Dayton,	154	—	154		2,697,090 00	2,742,000 00	4,594,159 44
" " " Findlay Branch,	Carey, Findlay,	16	—	16				
Marietta & Cincinnati,	Loveland, Marietta,	160	—	160				
" " Hillsboro Branch,	Blanchester, Hillsboro,	21	—	21				
Northern Indiana Air Line,	Toledo, Bryan,	72	—	72				
Ohio & Mississippi,	Cincinnati, Vincennes,	20	172	20				
Painesville & Hudson,	Painesville, Hudson,	—	—	—				
Pittsburg, Ft. Wayne & Chicago,	Pittsburg, Chicago,	253	213	253	82	6,230,359 25	[Funded.] 7,371,000 00	[Unfunded.] 1,951,875 00
Sandusky, Mansfield & Newark,	Sandusky, Newark,	116	—	116				
" " Huron Branch,	" "	9	—	9				
Scioto & Hocking Valley,	Portsmouth, Newark,	80	—	56	24			
Springfield & Columbus,	Springfield, London,	20	—	20				
Springfield, Mt. Vernon & Pittsburgh,	Springfield, Lakeville,	112	—	49	63	3,000,000		
Steubenville & Indiana,	Steubenville, Newark,	117	—	117		1,905,528 22	3,422,272 60	5,327,800 82
" " Cadiz Branch,	" "	7	—	7				
Toledo, Wabash & Western,	Toledo, Danville,	72	178	72		2,900,100 00	7,550,000 00	10,700,000 00

* Name changed to Sandusky, Dayton and Cincinnati Railroad.

The above table includes all the roads that have given us any definite information as to the questions we have asked. Among those neglecting to answer the question of capital, debt and cost of construction, will be

seen all the roads whose stock has proved worthless to their stockholders. If a railroad company has been well and competently managed, there can be no objection to its officers stating in public, the amount of

its capital stock issued, its debts and its cost of construction. Any disposition to conceal these items, may justly be regarded with suspicion, and should be so treated by all fair and candid men.

THE TURPENTINE LANDS OF FLORIDA.

An idea of the value of the lands on the line of the Pensacola & Montgomery Railroad, for the production of turpentine, may be gathered from an extract from the report of the Western Railroad Company, which runs from Fayetteville, N. C., to some point in the interior of that State. It will be perceived that the situation and prospects of that road are similar to ours—the former costing, however, much more per mile, while our lands are much superior to theirs, as is universally conceded by all who have examined them.

The Report states the purchase of 1000 tons of iron, part of which has arrived at Wilmington; the resources and liabilities of the Company; the amount of work done and to be done. &c.

The graduation and bridging of the whole 43 miles will cost \$314,323 56; the iron and other items \$227,403. Total cost of roadway \$614 436 56. For about 25 miles this road

will pass through an untouched pine forest. The timber, lumber and naval stores from which would furnish a fair business for the next ten years; and as round pines within a reasonable distance of transportation are becoming very scarce, the boxing and cutting of this new supply will be simultaneous with the laying down of the rails.

In fact, the purchase of iron for only 12 miles has already started the axe-men, and we have reliable information that if this 12 miles is laid down by July next, they will have the transportation of at least 40,000 barrels of turpentine.

With ten miles more, and another year, the quantity will be doubled, and it will continue to increase for many years. For as naval stores will bear hauling ten miles, there will be a scope of country 20 miles wide and 25 miles long, or 320,000 acres, to which the road will be accessible; and the increasing demand for those products which the long leaf pine

alone affords will insure the working of all this land, affording to the road as before stated a fair business for many years.

If the above estimates are true, we can with even more certainty predict similar effects here, for we have on the line of the Pensacola and Montgomery road more numerous advantages—better timber, and more accessible for transportation. So that by the 1st of May we may expect to hear the ring of the woodman's axe.

Pensacola Observer.

☞ The Quebec Board of Trade has petitioned the Colonial Parliament to guarantee three per cent interest on bonds to the amount of £12,000,000 (nearly \$60,000,000) for the construction of a line of railway from the Atlantic to the Pacific.

PITTSBURG, FT. WAYNE AND CHICAGO R. R. DIRECTORS' REPORT.

On the 1st day of August, 1856, you became associated together under the corporate title by which we now address you; and in the following pages we submit to you the First Annual Report, covering a period of seventeen months, in which is rendered a full account of the operations of the finished portion of the road, the state of the unfinished work, and the financial condition of your affairs.

It is proper also that the general condition at the date of the consolidation of the three several corporations which were merged into one corporation, should be stated to you, which will be done, in a few words, and with a few figures.

The Ohio and Pennsylvania Railroad Company had so far completed its road, as to be able to operate the same since April, 1853, between Allegheny City and Crestline. This Company still had a large expenditure to make, not only to comply with its charter and with its contract with the Pennsylvania Railroad Company, but at the same time to prepare to maintain itself in successful competition with new lines of road since that time almost daily opening for traffic.

The amount thus required had been estimated at \$400,000, which the stockholders of the Company, at their last meeting preceding the consolidation, agreed should be raised by a special issue of \$250,000 bonds, secured by a mortgage on the bridge and road east of Federal Street station, and by retaining all the net earnings of the road to the exclusion of dividends. The bonds were issued, and only six thousand dollars sold, although a large amount of work had been done in anticipation of sales, which to that extent had increased the floating debt. There was on the whole line a deficiency of shops, tools, water and wood stations, which called for a further immediate outlay, to enable the transportation department to work the road with economy. The equipment was not sufficient without being overtaxed, to earn interest on the capital invested and to be invested to complete the road. The south-western trade (after the local), was, previous to the consolidation, the main reliance of this corporation (the Ohio and Pennsylvania), and has since the year 1854 been from year to year diverted into other channels, completed and opened since that date, and the pregnable point with this Company was the fact that its two main extensions, west and south-west, were controlled by interests not in harmony with the Ohio and Pennsylvania Railroad Company, and the earnings of this road were doubtless at the maximum in 1854, so long as Crestline remained the terminus; and only upon the completion of the whole line to Chicago, which was the original design, (as stated in the Annual Report of the President in January, 1851,) could a larger income be anticipated.

The floating debt of the Company (Ohio and Pennsylvania,) at the date of the consolidation, is now ascertained to have been nearly as follows, viz:

Bills payable.....	\$713,947 61
From this amount, however, there should be deducted—	
Notes issued to recusant stockholders, who had to be paid before the consolidation could be perfected.....	143,710 00
Actual floating debt.....	\$565,237 61

With a floating debt of this magnitude, and the absolute necessity of a further expenditure of capital to the amount of more than

four hundred thousand dollars, to complete the road to its terminus in the city of Pittsburgh, with no other resource to meet the same than \$250,000 of bridge bonds and the accruing revenues of the road, it must be self-evident, that by no possibility could the Company have been in a condition to meet the disastrous times to which we have been compelled to succumb. In this connection it is important to remember the effect of the stage of water in the Ohio river upon the business of the road, and that for eleven months in the year 1857 the navigation was uninterrupted by ice or low water, and the rates of freight upon the river in consequence below all precedent. This would have materially affected the freight upon the Ohio and Pennsylvania Railroad.

The Ohio and Indiana Railroad Company had completed its track throughout its entire length from Crestline to Fort Wayne. It commenced operating the same in November, 1854, without any profit, it is believed, from that day until the date of consolidation. At the latter date, but a very small portion of track had been ballasted, and for a great portion of the time, was in so bad condition from defective drainage, and the absence of ballast, as to render it dangerous to run trains after night or even in the day time, at any other than a very low speed. Having no connection or outlet west of Fort Wayne, and the Ohio and Pennsylvania Company being governed in arranging time tables and other points of policy with reference to other, and, to that Company, at the time more important connections, the Ohio and Indiana Company was left in an isolated position, and entirely dependent upon the local traffic of a district of country just beginning to be developed. To this Company, the consolidation was the last and only hope of saving any thing to its stockholders.

On the 1st of August, 1856, the floating debt of this Company was, as has since been ascertained, as follows:

Bills payable.....	\$231,465 68
Due bills.....	29,032 16
Accounts payable.....	54,993 78
Construction claims assumed since August 1st, 1856.....	44,520 31
Transportation claims.....	110,352 32
Floating debt.....	\$469,362 25
To which should be added acceptances received from Ohio and Pennsylvania Railroad Co.....	15,000 00
Actual floating debt.....	\$484,362 25

The estimated amount required, at the date of consolidation, to complete and equip this road as a first class road, was \$688,664, which, with the floating debt, make an aggregate of \$1,173,450 28 to be protected by the new Company.

The Fort Wayne and Chicago Railroad Company had completed its road to Columbia City, twenty miles west of Fort Wayne, and operated the same since February, 1855; but, of course, the very limited business on such a piece of road, promising nothing but loss, until a greater length could be brought into use, and the whole line worked in harmony from Pittsburgh. The Company had in bond sufficient iron to lay their track to Plymouth, and the grading so far advanced on that forty-five miles, as to render it certain that with means the whole line from Pittsburgh to Plymouth could be brought into use a few months after the consolidation. The Company had, however, no immediate prospect, and only a very shadowy hope of being able, unaided, to complete this forty-five miles, and of course the more remote prospect and more faint hope

of being able to finish the road to Chicago, unless it could be effected by the unity of strength and purpose created by the consolidation.

The floating debt, at the date of consolidation, has been ascertained to be as follows, viz:

Bills payable.....	\$172,527 26
Accounts payable.....	87,525 68
Construction claims allowed since August 1st, 1855.....	62,856 29
	\$322,912 22
To this should be added the note received from the Ohio and Pennsylvania Co.....	50,000 00
Total floating debt.....	\$372,912 22

Liabilities of the O. & P., O. & I., and F. W. & C. R. R. Cos. paid and assumed by P., F. W. & C. R. R. Co.

Ohio and Pennsylvania Railroad Co.....	\$713,947 61
Ohio and Indiana Railroad Co.....	469,762 25
Fort Wayne and Chicago Railroad Co.....	284,312 22

Total Liabilities of three Companies as of August 1st, 1856.....\$1,468,046 08

Assets received from said Companies by P., F. W. & C. R. R. Co.

Ohio and Pennsylvania Railroad Co.....	\$179,326 75
Ohio and Indiana Railroad Co.....	44,945 36
Fort Wayne and Chicago Railroad Co.....	22,052 66

Total Assets of three Companies as of August 1st, 1856.....\$246,324 77

It was, perhaps, wise that the building of the line of railroad from Pittsburgh to Chicago should, at the inception, have been committed to three several corporations; for in this way local interests could, to a much greater extent, be brought into effective operation, a greater number of parties enlisted in the enterprise, and a more vigorous, active and persevering policy inaugurated, than could be effected by a single corporation, with only such means at their disposal as those upon which reliance had to be placed to carry on and complete this work.

Before the consummation of the work, and whilst a portion of the line was necessarily worked with reference to other interests, it became apparent that the time had arrived when a concentration of effort, means and purpose, was necessary to complete the line, and could no longer be delayed without risk of the ultimate safety of the capital invested in each of the sections or companies; furthermore, it was no less evident that when completed, no management that was not guided and directed by one corporation or head for the entire interest could prove effective, and that these objects essential to their very existence could be accomplished but in one way: by reducing three corporations into one—hence the consolidation.

The Board of Directors now rendering to you an account of their stewardship, on assuming the management of your Company affairs, found 338 miles of road in use between Allegheny City and Columbia City, for their management, with reference to a revenue to be derived therefrom.

1. After the organization of the Board, no time was lost in procuring a large and efficient force, to push forward the work between Columbia and Plymouth, so as to bring the whole line into use at the earliest day possible. They were enabled to procure the necessary means to effect the object, through a loan of credit by the Pennsylvania and the Harrisburg and Lancaster Railroad Companies, to the extent of \$250,000, which those companies granted in view of the importance to them of having an extension of their line through to Chicago, by which their roads would form a portion of the shortest and most

direct route between New York and Philadelphia and the north-west. The then Chief Engineer of the Company, J. L. Williams, Esq., by his energy and sound judgment, as well as precaution in having every thing in the right place and at the proper time, completed the grading, bridging and track laying of this forty-five miles in about ninety days. The first passenger train passed over this portion of the road on the 10th day of November following the consolidation, and a few days after that the Superintendent took possession of the road, for the regular passenger and freight business of the Company. Until the 1st of December, this business was carried over the Cincinnati, Peru and Chicago, and the Michigan Southern Roads, without any definite arrangement; but subsequent to that date, and up to the present time, under a written contract with each of those companies. The Board regret to have to inform you that their expectations in reference to the extent of business and the profits to be derived from the same, through the means of this indirect route to Chicago, have not been realized in consequence of the very high rate charged by each of the companies on the business of this Company, and of the insufficient accommodations and facilities granted for the business of this Company, as well as the delay, annoyance and expense of transferring all freight and passengers at Plymouth, which is rendered necessary by the difference in the width of track of the two roads.

2. The masonry of the Allegheny River bridge was nearly completed, and the superstructure under contract, and some work done at the date of consolidation.

Work was continued on both of these expensive contracts without the loss of a day, but not pressed, in consequence of the great difficulty in procuring means to keep men steadily at work, and of the continued opposition of the Councils of Allegheny City to allowing the Company to carry its track through the city beyond its then terminus. Without having realized, from the sale of bridge bonds but about \$30,000, the bridge was completed in September, 1857, at an aggregate cost of \$154,000, (exclusive of track,) and we take pleasure in assuring the stockholders of the Company, that a more permanent (wood superstructure) work, or one more faithfully executed on the part of the contractors is not to be found in this country. Henderson and Allston were the contractors for the masonry and stone, Quigly and Company for the superstructure. The whole work was planned and built under the supervision of Solomon W. Roberts, Esq., Chief Engineer of the Ohio and Pennsylvania Railroad Co. After long delay, and much negotiation, a contract was signed with the authorities of Allegheny City on the 21st day of April, 1857, by which the Company secured the right of way through that city, and although the contract is onerous upon the Company, it was deemed better to accept the terms than to continue the controversy. As soon as this agreement was signed, the contractors on the whole line through the city were put to work and urged forward as fast as the nature of the work and the restricted means of the Company would allow. On the 22d day of September, 1857, the track was completed to the Company's property on Penn street, in the city of Pittsburg, and the same day the passenger trains were carried to that point, and have since continued to arrive and depart from Pittsburg instead of Allegheny City. The portion of the line between the "turn

out" in Allegheny City and Penn street, in the city of Pittsburg, is the most expensive of all the Company's work in proportion to its length, which, from the "turn out" in Allegheny City to the south end of the bridge in Pittsburg, is 4616 feet, or seven-eighths of a mile, and the entire distance is made up of the most substantial trestle-work on stone foundations, one iron plate bridge and four arch bridges of ten spans, of an aggregate length of arch of 1340 feet. The whole is laid with double track, was planned by and built under the direction of G. W. Leuffer, Esq., the Chief Engineer of the Company, in a manner superior to any work of the kind known to your Board.

3. The work of ballasting the portion of the road between Crestline and Fort Wayne was commenced a few weeks before and in anticipation of the consolidation, so important was it to get the track in a condition to be used at even moderate rate of speed, and that the machinery might be run over it with reasonable economy. The cross ties upon this portion of the road were both too small and too far apart, and the Board made a special order to put in an additional cross tie to each length of rail, the extra tie to be much larger than those in use, and to be placed under the joints of the rails. During the summer and fall of 1856 some ten miles of track were ballasted, the road-bed drained, and track at other points adjusted, without gravel, so that by the 1st of January, 1857, trains could be run at a fast rate of speed, and with only ordinary wear and tear of machinery and stock. During the year 1858 the putting in of extra cross ties and ballasting was continued to the extent that the means and credit of the Company would admit, and which resulted in ballasting so much of the road as to now leave fifty miles (of the 131) yet to be ballasted. Between Fort Wayne and Plymouth the ballasting was commenced soon after the track layers had completed each section, and continued until interrupted by winter. In 1857 the ballasting on this portion of the road was resumed and a small force kept at work until the 1st of November. This portion of the road is now in good order, excepting about 30 miles yet to be ballasted. The whole amount expended for ballasting by this Company, between Crestline and Fort Wayne, is \$48,471 47; and west of Fort Wayne, \$42,500.

4. The equipment of the several roads at the date of consolidation, and on hand at the time of opening the line to Chicago, *via* La Porte on the 10th of November, 1856, was as follows:

70 locomotives; 47 first class passenger cars; 7 second class passenger cars; 17 baggage cars; 487 house and stock cars; 145 platform cars; 233 gravel cars.

Of this equipment, the six locomotives received from the Fort Wayne and Chicago Company had been but a short time in use. They were built by the Boston Locomotive Company, and were of a weight and capacity well suited for the line of road. The first class engines received from the Ohio and Pennsylvania Railroad Company were generally in good order, but among the engines of this Company were quite a number pretty well worn, and several too small to be of much service in either the passenger or freight business of this Company. The engines received from the Ohio and Indiana Company were not in good order. The passenger and freight cars received from the Ohio and Pennsylvania Company were in good order, ex-

cepting such as were defective in their original construction, and they needed expensive repairs before they were fit for service. The passenger and freight cars received from the Ohio and Indiana Company were, partly from use over a very rough track, and partly from inferior build, in need of repair. In view of the condition of the equipment, of the additional length of road brought into use, and of the anticipated increase of business, the superintendent, soon after the consolidation, made a requisition upon the Board for a largely increased number of engines and of passenger and freight cars. The Board, after having fully considered the whole question, ordered the purchase of additional equipment, which was done to the following extent, viz.:

25 first class locomotives; 12 first class passenger cars; 16 emigrant cars; 2 express cars; 100 stock cars; 135 box freight cars; 54 platform cars.

The equipment now upon the road, if kept in good repair, (and true economy requires that this should be done,) will be sufficient for all the business it is reasonable to hope for, until some time after the completion of this road to Chicago.

The whole line from Plymouth to Chicago, a distance of 82 miles, was put under contract on the 21st of May, 1853, by the Fort Wayne and Chicago Railroad Company, but owing to the suspension of the work at two several periods, most of the contractors, at the date of consolidation, had abandoned their contracts. The portions thus abandoned were re-let by this Company on the 30th of January, 1857, at fair rates and most favorable terms of payment, to Mr. Lewis Broad, of Chicago, a very able, efficient and trustworthy contractor. Soon after, Mr. Broad and other contractors on the line commenced work, and have steadily continued their operations ever since. The Board have been enabled, under a very heavy weight and most discouraging circumstances, to thus persevere with the work without drawing upon the Treasury of the Company for but a very small amount of money. Their main dependence has been in the real estate (referred to in another part of this Report,) of the Company, and "material aid" furnished by the public-spirited citizens of Porter and Lake counties, Indiana, who have long and earnestly labored for the completion of this their favorite road; and we trust their hope, so long deferred, may soon be realized. The past six months has been one of those periods unusually propitious for doing a large quantity of work with a small amount of cash means; and by seizing upon the opportunity, the Board has been able to avail itself of legitimate means, not money, so as to keep at work through the fall and winter just passed, a force of about four hundred men and sixty head of horses.

The grading and bridging are far advanced towards completion, and on the sections just west of Plymouth the road-bed is ready for the track. Should the track layers commence work soon after the 1st of April, the road-bed on the entire line can be made ready for them as fast as the track can be laid down, and this without a very large increase of the force now at work on the grading. To complete the work, there is required about two hundred and fifty thousand dollars in cash, say five hundred tons of rails, and the chairs and spikes sufficient for the 82 miles.

On the 5th of January, the Board elected J. Edgar Thompson, Esq., Chief Engineer of the Company, with full power to contract for the completion of the road, and placed in his

hands means to that end. Under the authority thus given, and means thus set aside, arrangements are being made with parties to furnish the cash capital, and complete the road into Chicago by September next; which, if they receive your sanction on the 30th inst., will at once be perfected, and thus secure a permanent value to your shares which otherwise are in very great jeopardy.

The Company has in the States of Ohio, Indiana, and Illinois, a large body of lands, consisting in part of valuable farms, but mostly of unimproved lands of a character greatly to appreciate in value with the increase of population and development of the country. The cash value of the whole of these lands at the date of consolidation, was estimated at \$971,521 59.

The earnings for the seventeen months have been—

From Freight.....	\$1,559,701 45
From Passengers.....	1,313,321 63
From Mails.....	73,878 28
For Rents.....	7,087 91
From Miscellaneous sources.....	2,115 37
Total.....	\$2,456,004 64

For all that can be seen at present, it is not safe to estimate the gross earnings of the road for the year 1858, at more than \$1,700,000.

The transportation expenses for the seventeen months have been \$1,308,445 96.

Equal to 53½ per cent of the receipts.

It is to be regretted that shareholders in Railroad Companies are generally too inattentive or negligent of the manner in which the business of their roads is conducted. Nothing can more conduce to a faithful and profitable management of a railroad than a full attendance of all its owners, and an active and intelligent participation in the proceedings at all their stated meetings. For, however complimentary the Directors may esteem it to be intrusted with such weighty responsibilities and such large discretionary powers, they would earnestly solicit the advice and counsel of those who are equally interested with themselves in the successful management of the trust committed to them, as, in some measure, relieving them from the heavy burden of responsibility which the trust imposes.

With a view to incite a more vigilant attention of the shareholders to the management of the business of their road, the Directors have so amended their By-laws as to provide for two meetings of shareholders in each year.

OFFICERS.

George W. Cass, *President*; Joseph K. Edgerton, *Vice President*; Thomas D. Messler, *Secretary and Auditor*; Joseph H. Moore, *Superintendent*; Charles T. Sherman, *Solicitor*; J. P. Henderson, *Treasurer, Pro Tem.*; Joseph K. Edgerton, *Financial Agent*.

BOARD OF DIRECTORS.

George W. Cass, William Robinson, Jr., William Wade, Pittsburgh, Penn.; John Edgar Thomson, Philadelphia, Penn.; Charles T. Sherman, Mansfield, Ohio; Charles M. Russell, Massillon, O.; John Larwill, Wooster, O.; Robert McKelly, Upper Sandusky, O.; Samuel Hanna, Joseph K. Edgerton, Fort Wayne, Ind.; William Williams, Warsaw, Ind.; A. L. Wheeler, Plymouth, Ind.; Wm. B. Ogden, John Evans, Chicago, Ill.; New York—vacant.

THE GREAT WESTERN RAILWAY OF CANADA.

The half-yearly meeting of the English Board of Directors was to have taken place in London on the 7th inst.; preparatory to the meeting the Report had been distributed among the shareholders, for a copy of which we are indebted to the Secretary. We make a summary:

The total amount of share capital which this company is authorized to raise is, in shares, 178,000; and in currency £4,450,000.

"Of the above, 8,300 original shares have been reserved to meet the conversion of bonds, and on the new shares there remains to be called up £7 10s sterling, or £6 3s currency per share less, the sum of £16,525 7s.6d currency received in advance of future calls.

The total amount received on capital accounts to 31st January, 1858, was	£3,457,162 2 8
Consisting of:—	Currency.
Share capital.....	£3,479,933 6 9
Convertible bonds.....	267,510 0 0
Nonconvertible bonds.....	£31,449 0 0
Government loan (to be paid off).....	938,888 11 11
	5457,162 2 8

"And the total expenditure to that date is as follows, viz:—

On account of the Great Western proper—comprising the main line the Galt Branch, and the Hamilton and Toronto line, in all 279 miles.....	Currency. £4,932,194 7 1
On the Sarnia Branch (50 miles) not yet opened.....	422,167 2 0
On the Galt and Guelph line (15 miles).....	110,049 16 2
	£5,464,414 5 3

Detroit and Milwaukee Railway Company in part of loan voted at general meeting of the proprietors of the Great Western Railway held in England 8th October, and in Canada 2nd November, 1857.....	28,451 19 7
	£5,492,866 4 10

"In the report of July 31st, 1857, it was stated that arrangements having been concluded with the provincial government for the repayment of the advance made to the company, the amount hitherto reserved as a sinking fund had been transferred to revenue account, and which, with the undivided balance of last half-year, amounted to £68,379 16s 3d. The directors have thought it right at once to carry to the debit of this surplus revenue the whole cost incurred and compensations actually paid for the Desjardins Canal accident last year, amounting to £30,453 1s 10d.; and, in addition to which bonds maturing at various dates from one to five years have been given for an aggregate sum of £9822 19s 4d., which will be placed against revenue as they mature. There are still three or four unsettled cases, but the directors do not anticipate that the amount to be paid will be large, the heavy claims being already disposed of. The whole cost of replacing the compound rails by fish jointed T rails has also been carried this half-year to the debit of revenue to the extent of £21,897 10s 3d. The urgent necessity of removing these defective rails was adverted to in the engineer's report to July 31, 1857. The directors have therefore written of these two items instead of spreading this outlay over several half years.

"A further unusual amount is also carried to the debit of revenue this half-year, £6,337 5s 7d., being so much traffic receipts overstated erroneously for the half-year ending July 31, 1856, during the period that the audit office books were under the direction of the late accountant, and it is therefore necessary that this sum should be deducted from the published earnings of the railway.

These three items together amount to £58,737 17s 8d., and after deducting which, together with the charges proper to the half-year for interest on Government loan and on the Company's bonds, the balance of net revenue amounts to.....	£ 103,654 9 11
Out of which the Directors recommended the payment of a dividend for the half-year at the rate of 5 per cent. per annum, which would amount to.....	92,446 10 11

And leave a surplus to be carried to the ensuing half-year of..... £ 11,207 19 0

"The traffic during the last half-year, as compared with the corresponding period of 1857, shows a decrease of £82,248 3s 8d., but is only £12,524 6s 5d., less than for the previous six months. The average weekly earnings have been at the rate of £11,847 18s 7d., which is equal to £40 14s 4d. per mile per week. The receipts on the main line have been £16 5s 2d. per mile per week; on the Toronto branch, £27 14s 11d. and on the Galt branch, £11 1s 5d. The actual working expenses have amounted to £162,314 17s 2d, against £185,616 1s 6d, for the corresponding period of the previous year. The cost per train mile is 5s 5½d, against 6s currency. The cost of maintaining the permanent way has amounted to £24,426 13s 2d, being at the rate of £167, 17s 7d, per mile per annum, or a reduction of £37 14s 5d per mile on the charge during the corresponding half-year. The actual net earnings of the line during the six months have been £140,776 16s 4d, which, after payment of interest on bonds and loans, is equal to £5 13s 6d per cent. per annum upon the expenditure on the opened lines.

"From the report of the engineer it appears that the line and works are in an efficient state of repair. The locomotive expenses amount to £61,206 3s 8d., and the miles run by engines earning revenue (including the piloting and shunting of trains) having been £758,300, the cost per mile is 1s 7½d., against 1s 7¼d, per mile for the corresponding period of 1857. Owing partly to the unusual severity of the winters of 1855 and 1856, the expenditure in this department has been high during the last two years, but it is hoped that considerable reduction may in future be effected.

"The great decrease of traffic, as compared with the corresponding period of last year, requires a few words of explanation.

"Since the date of the last report, the commercial affairs of the American continent have been shaken to their foundations. With few exceptions, all the banks in the United States were compelled to suspend specie payments; a vast number of mercantile failures took place; for several months confidence was completely paralysed, and a wild and resistless panic existed from one end of the continent to the other. The natural result of this has been a complete prostration of business, and when to this is added a continued decline in the value of the staple productions of the country, it is not surprising that the traffic on Railways has suffered a very heavy decrease. The constant fall in the price of wheat and flour in the Eastern markets, has checked the transport of these articles—the impossibility of effecting sales of produce has prevented western merchants and others from meeting their engagements, and consequently the quantity of goods purchased for consumption in the west has been entirely nominal. This has necessarily greatly diminished the through traffic of this and all other lines running between the east and west; but it is a subject of congratulation, however, to find that in this general depression the traffic of the

Great Western Railway compares favorably with that of any other lines similarly situated.

"The same causes which have had so serious an effect upon the through traffic, have also necessarily produced a very large decrease in the local business of the line. In consequence of the extreme depression in prices, a large portion of last year's wheat crop still remains in the country unsold. This is productive of serious embarrassment to the agricultural and commercial interests.

"Both Canada and the Western States of America are now passing through a severe and depressing crisis; a bountiful harvest during the present year will go far to place the business of the country upon a sound and improving footing, and a sure and lasting benefit must result from the present severe depression. The value hitherto placed upon land and other property has been proved to be absurdly extravagant, and the price of agricultural land must now fall to a point which will attract the class of settlers most wanted in this country, and thereby add materially to her prosperity.

"Reviewing the commercial disasters of last autumn, and considering their effect upon the business of the American continent up to the present time, the directors feel they are fairly entitled to congratulate the shareholders that in such a trying period the Great Western Railway has proved that it possesses resources sufficient to yield a profit in the working of the half-year equal to a dividend upon the cost of the line of upwards of $5\frac{1}{2}$ per cent. per annum. They consider that this fact is a conclusive evidence of the soundness and intrinsic value of the property, and of its future prosperity, when the business of the country shall have again revived.

"There still remains the sum of £52,863 3s 9d to expend in completing the unfinished works on the opened lines, to bring the capital expenditure to the limits of £4,982,662 16s currency, fixed by the shareholders at the half-yearly meeting held on 11th September, 1856.

"The outlay on the Sarnia branch, including the cost of rails and rolling stock already delivered for the working of that line, now amounts to £422,167 2s. It is intended to complete and open this branch for traffic before the close of the present year, and it is hoped by the Spring of 1859 the extension from Port Huron, in connection with the Detroit and Milwaukee Railway, will also be in operation.

"The expenditure on account of the Galt and Guelph Railway now amounts to £110,042 16s 2d. The line was opened for public traffic on the 11th September, 1857.

"Immediately after the resolution passed by the shareholders at the meeting in London on the 8th of Oct. last, in regard to the Detroit and Milwaukee Railway Company, the directors caused a careful examination to be made into the statements furnished by that company as to its affairs and accounts, and the result of a complete and thorough investigation showed that the sum of £150,000 sterling would be sufficient to meet the claims of the secured creditors, and leave enough to open the line and provide the necessary rolling stock. Negotiations were accordingly opened with these creditors, which have resulted in an extension of time for the payment of their claims. Upon these arrangements being completed, a mortgage in favor of Mr. C. J. Brydges, Mr. T. Reynolds, and Mr. H. C. R. Becher (members of the Cana-

dian Board of the Great Western Railway,) as trustees, was executed by the Detroit and Milwaukee Company to secure this advance of £150,000. This mortgage has been most carefully drawn, and under its stipulations the entire control of all the affairs of the Detroit and Milwaukee Company is placed in the hands of directors, to be from time to time nominated by the Great Western Railway Company.

"Favorable arrangements have been made for the completion of the works, securing the opening of the line (for an expenditure within the amount of the disposal of the company) to Grand Rapids on or before the 1st of May, and throughout to Lake Michigan, opposite Milwaukee, during the month of August next. The condition of the line when opened will be quite equal, if not superior, to the average of new railroads on the American continent, and the quantity of rolling stock will suffice for the traffic of the autumn. A further amount will be required to pay off the unsecured debts, to fully ballast the line, to complete all the works, and to provide sufficient station accommodation and rolling stock. The extent of the requirements under the latter heads will best be determined when some experience has been had of the amount of traffic. That this traffic will prove amply remunerative the directors have no doubt strengthened as their previous convictions upon this point have been by the careful examination made into the Detroit and Milwaukee Company's affairs by the executive of this Company in Canada. The following figures will place the soundness of this opinion in a strong and marked light.

"During the last half-year of unexampled depression, the traffic upon the two undermentioned lines show as follows:

	Per mile per week.
Michigan Central.....	\$151 79c.
Great Western of Canada.....	\$162 87c.

"The amount of gross traffic required to pay the interest upon the whole of the borrowed capital of the Detroit and Milwaukee Company (\$4,956,000, or about £1,000,000 sterling, on a line of 185 miles in length) allowing 50 per cent for working expenses, is only about \$76 per mile per week, which places the success of the company beyond any doubt; and for whatever money is still required for that company there is the certainty of the traffic being quite sufficient to yield a full security and a handsome return.

The value to this company of the connection with the Detroit and Milwaukee Railway the directors consider as most important, and they look forward consequently to the autumn traffic of the great western Railway receiving a great accession of business from that source.

"To complete the system of railways in Michigan, upon which this company relies for so large an addition to its through business, there has also to be considered the important link of about ninety miles, connecting the Detroit and Milwaukee Railway from Owosso with Port Huron, which is immediately opposite to the terminus of the Sarnia branch of the Great Western Railway. That line, known as the Port Huron branch of the Detroit and Milwaukee Railway, when completed, will form the most direct line between Milwaukee, the natural outlet for the vast trade of the north-western states, and the great marts of commerce on the Atlantic seaboard.

"The directors would be glad to see active steps adopted to ensure the completion of this line, and to bring it under the same control

as the Detroit and Milwaukee main line, the value of it to the Sarnia branch being obvious. When finished, the system of railway communication in Northern Michigan, in connection with the Great Western Railway, will be complete. Works to some extent have already been executed, but the further prosecution of them has, owing to circumstances been retarded.

"In order to carry out the arrangement for the repayment at par of the advance of £770,000 sterling from the Provincial Government, which was sanctioned at the last general meeting of shareholders, the directors propose to avail themselves of the prospects of an easy money market to pay off this debt at earlier periods than stipulated, and in such instalments as circumstances may render convenient, should the acquiescence of the Canadian Government be obtained.

"The amount it is proposed to raise for this purpose by the issue of a guaranteed debenture stock, bearing 5 per cent. interest, payable in London, half-yearly, with the option of conversion into ordinary shares at any time prior to 1863, the terms of conversion being, as formerly, five shares of £20 10s. sterling each for £100 bond. It is intended to offer this issue, in the first instance, to existing shareholders of the company. With the large paid-up share capital and the extinction of the prior claim of the Government, the security afforded in common with the existing bonds of the company is incontestible, and it is considered the option of convertibility is a valuable feature. For the convenience of shareholders and capitalists who may desire to lend money for a limited period, the directors have decided to issue bonds at the same rate of interest, repayable in 1881, and with the same option of conversion attached.

"London, March, 1858."

MADISON AND INDIANAPOLIS RAILROAD.

The receipts and expenditures of the Madison and Indianapolis Railroad for 1857, were as follows:

TRANSPORTATION RECEIPTS.	
Passengers.....	\$58,799 95
Freight.....	93,478 76
Hogs.....	16,172 63
Express.....	3,360 00
Mail.....	3,891 95
Jeffersonville R. R. acc't, 1858.....	\$ 3,041 10
" " " " 1857.....	30,223 18
Sundry sources.....	33,279 28
Miscellaneous, including \$2,924 08 over-draft on the Treasurer.....	3,601 73
Total.....	\$260,213 88
EXPENDITURES.	
Repairs, cars and machinery.....	\$39,222 50
" " " " road.....	26,759 82
Running road.....	25,894 03
Wood.....	18,755 41
Depots.....	12,219 15
Salaries.....	8,969 97
Loss and Damage.....	381 69
Oil and Waste.....	3,495 74
Stock killed.....	744 35
Contingencies.....	2,65 03
Water stations.....	3,177 46
	\$141,756 05
Miscellaneous, including interest, taxes, extraordinary repairs, construction, &c.....	118,627 83
Total.....	\$260,213 88

The report says:

"During the last year we have renewed 19,709 ties, built stone abutments (to replace those constructed of wood) to several of the smaller bridges, requiring about eight hundred yards of masonry, which have been built in so permanent a manner that they will hardly have to be renewed during the existence of the road, and about fifteen miles of the road has been ballasted."

AMERICAN SCIENTIFIC ASSOCIATION.—BALTIMORE, April 28.—The American Scientific Association assembled here this morning at 11 o'clock, at the Maryland Institute.

About one hundred delegates are present.

The following is the list of officers:

President, Prof. Jeffries Wyman; Vice-President, Prof. John E. Holbrook; Permanent Secretary, Prof. Joseph Lovering; General Secretary, Prof. William Chauvenet; Treasurer, Dr. A. L. Elwyn; Standing Committee—the above named, together with Prof. Alexis Caswell and Prof. John Leconte.

In the absence of Prof. Wyman, Alexis Caswell was called to the chair.

Extensive arrangements have been made by our citizens for extending the proper hospitalities to the members.

MICHIGAN SOUTHERN RAILROAD.—Toledo, April 28.—At an election for Directors of the Michigan Southern Railroad held here to-day, the following gentlemen were elected:

R. S. Burrows, Hiram Sibley, Edwin C. Litchfield, John S. Prouty, Nelson Beardsley, Sansom Gardiner, John C. Wright, William Walcott, Wm. B. Wells, Clarkson N. Potter, Ezekiel Morrison, J. H. Ransom and George Bliss.

About 60,000 votes were cast, of which the ticket elected received 48,000.

The Cincinnati Price Current contains a statement of the exports of provisions from the United States, from Jan. 1 to about April 1. The aggregates, reduced to pounds, compare as follows:

1857, lbs.....68,219,900
1858, lbs.....88,554,350

Falling off.....29,765,350
This decrease is equal to about 200,000 hogs, but as an offset we have the deficit in the stocks in the country on the 1st of November, the latter being equal to at least 300,000 hogs. Taking the increase in the hog crop, and putting the figures together, the result is as follows:

Excess in crop of hogs, head.....380,000
Decrease in foreign exports, equal to head.....200,000

Total, head.....580,000
Deduct deficit in old stocks, head.....300,000

Net excess, head.....280,000

This exhibit, as regards the net excess, is based upon the supposition that the home consumption has been equal to that of last year. —*New York Tribune.*

The railroad traffic in some portions of the West continues to improve. The second week in April on the Wabash Valley Road gives \$22,800 against \$19,100 for the 1st week. The month promises to reach, \$80,000 against \$51,000 last April. The receipts of the Erie are about 70,000 ahead of the same period of last April, and the Harlem for the first nineteen days shows a gain of \$4,200, with largely reduced expenditures. The business of the Milwaukee and Mississippi Road is favorable, and the daily earnings about \$3,000. The Illinois Central earning for two week are about \$80,000. The New York Central earnings for six months have been:

	1857-58.	1856-57.	1855-56.
October.....	\$631,442	\$590,380	\$736,420
November.....	610,775	750,428	676,981
December.....	632,299	687,577	668,857
January.....	460,000	460,522	461,800
February.....	408,225	458,140	383,802
March.....	557,926	687,979	521,199
Total, 6 months..	\$3,340,527	\$4,005,486	\$3,447,260
		3,340,527	

Decrease, 1858-57.....\$664,499

The following are the earnings of the Baltimore and Ohio Road for March:

	Main Stem.	N. W. Va.	Wash. B'ch.
For passengers..	\$ 64,591 05	\$ 3,373 40	\$30,692 21
For Freight.....	316,420 32	24,555 41	12,016 89
Total.....	\$371,011 37	\$27,928 81	\$42,709 20

The revenue for March is as follows:

Main Stem.....	\$371,011 37
N. W. Virginia.....	77,928 81
Washington Branch.....	42,709 20
Total.....	\$441,649 38

These figures show a falling off from March, 1857, of \$166,613 10, the receipts then being \$518,262 48. The total receipts for last month (February) were \$280,273 96, showing a gain of March over Feb. of \$161,275 42.

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,

AND AT PRIVATE SALE.

BY HEWSON AND HOMES,

April 28, 1858.

BONDS.

\$10,000 Gov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	35 and int.
\$8,000 Gov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	55 "
\$5,000 Cin. Ham. & Day. R. R. 7 per cent.	
2d Mort. Bonds.....	73
\$6,000 Little Miami R. R. Co. 6 per cent.	
1st Mort. Bonds.....	77 1/2
\$1,400 Col. & Xenia R. R. Co. 7 per cent.	
Div'd Bonds, due 1861 and '62.....	83
\$2,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	74
\$1,000 Ohio & Miss. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	30
\$840 Little Miami R. R. Co. 6 per cent.	
Dividend Scrip.....	77
\$3,400 Township of Ottawa, Putnam Co., Ohio, 7 per cent. Bonds.....	50
\$4,759 Certificates of Deposit in Ohio Life Ins. & Trust Co.....	35 1/2
\$1,000 Gov. & Lex. R. R. Co. 6 per cent.	
Income Bonds.....	15 1/2

STOCKS

100 Shares Cin'ti., Hamilton & Dayton..	42 1/2
65 Shares Little Miami R. R.....	77
13 " Columbus & Xenia.....	75
50 " Indianapolis & Cincinnati.....	43
18 " National Ins. Co.....	75
830 " Dayton & Cin. (Tunnel) R. R.	
Co. Delinquent Stock.....	\$2.00 to \$2.50 per Share.

MONETARY AND COMMERCIAL.

The markets for money during the week have exhibited in full the usual appearance of preparation for the payments of the first and fourth. In the early part of the week capital was in fair supply with rates favoring lenders. Towards the last two days, money has been quite close as compared with the previous week. Rates, however, have not materially advanced. We still quote regular rates at 10 to 12 per cent. for premium paper; outside rates 12 to 15 for first class, and 18 to 24 and 30 for lower grades.

Eastern Exchange, which has been drooping at lower figures, has revived, and was again firm at 1/2 buying to 3/4 premium selling. Gold is dull sale—the dealers being generally pretty well supplied.

In general business, trade is not quite as brisk as the dealers would like. There is, however, a moderate amount of spring trade, and this with the moderate preparations of the merchants, will probably render the spring business about as profitable as the average.

At the East we notice a continuance of the abundance of capital, previously noticed. The contrast between the rates now prevalent and those of last fall, is wonderful.

We subjoin our usual quotations from Hewson and Holmes:

Dullness continues to be the prevailing feature of the stock market. The demand for all classes of securities is very limited; Capitalists do not seem disposed to make investments at the present moment, except in first class business paper. Prices of our leading securities are however well sustained, and there seems to be no unusual anxiety on the part of present holders to force them off at less than our last quotations.

Money has been in active demand and the supply hardly as liberal as last week; good signatures are however passed at 10 to 12 per cent., and second class at 24 per cent. per annum.

Eastern Exchange after being dull and prices drooping for some days, is again firm with sales of Bankers Checks at 3/4 to 3/4 prem. New Orleans Drafts are 1/2 discount to par. St. Louis, payable in Missouri currency, 1/4 discount to par, and in gold 1/4 to 1/4 prem.

We note sales of Covington & Lexington 2d and 3d mortgage bonds respectively at 55 and 35 and int.; Hamilton & Dayton 2d mortgage at 78; Little Miami 1st mortgage 6's at 77 1/2; Indianapolis & Cincinnati 2d mortgage at 74. In Stocks, we report sales of Hamilton & Dayton shares at 42 1/2; Little Miami at 77; Columbus & Xenia at 75; Indianapolis & Cincinnati at 43.

We understand that the scheme for capitalizing the securities and debts of the Ohio & Mississippi Railroad Company has been abandoned; all who have examined the subject believe that a plan somewhat similar, but which will graduate the securities differently, would, if carried out, speedily increase their value. We think the plan of reducing the aggregate securities of all high cost roads to something near their actual value will have to be resorted to, before they can be worked out of their troubles, and the sooner it is adopted and carried out the better.

SALES AT THE NEW YORK STOCK BOARD—April 26.

\$3,300 U. S. 6's, '65.....	102 1/2
\$19,000 Ohio State 6's, '66.....	107
1,000 Tenn. State 6's, '60.....	89
3,000 N. Car. State 6's.....	93
7,000 Miss. 6's.....	83
1,000 Virginia 6's.....	90 1/2
3,000 Erie 2d Mort. Bonds.....	90
15,000 La. & Mil. L. G. B's.....	31 1/2
19 Pacific Mail St. Co.....	80
300 Shares New York Central.....	88 1/2
28 " Erie R. R.....	25
160 " Panama.....	107
5 " Cleve., Col. & Cin. R. R.....	92
370 " Hud. River R. R.....	30 1/2
675 " Harlem R. R.....	12
17 " Third Avenue R. R.....	103
200 " Reading.....	47
100 " La Crosse & Milwaukee.....	84
80 " Mich. Cent.....	61 1/2
32 " Mich. S. & N. Ind.....	24 1/2
58 " Mich. S. & N. Ind. pref.....	42 1/2
100 " Cleveland & Toledo.....	43 1/2
10 " Chicago & Rock Island.....	76
150 Shares Milwaukee & Miss.....	72
9 " Galena & Chicago.....	85 1/2

WOODRUFF'S PATENT SLEEPING CAR,

AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. WOODRUFF, Alton, Ill.
G. R. DYKEMAN, " "
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

Influence of the Composition of the Blast-furnace Cinder upon the Strength of Hot-Blast Iron.

MM. Janoyer and Gauthier have found that the strength of iron smelted with a hot-blast depends very much upon the amount of limestone used in the operation. Pig iron obtained with a charge yielding a cinder, in which the proportion of lime and alumina to silica was as 7 : 10, had little strength, but broke readily, and analysis showed that it contained 3 per cent. of silicium. The large amount of silicium in pig iron smelted with hot-blast, is probably due to the easier reduction of silica at the high temperature which prevails in the fusion zone of hot-blast furnaces. Hence MM. Janoyer and Gauthier were led to the opinion that, by increasing the amount of lime in the charge, so as to obtain a cinder containing a larger amount of lime, this reduction of silica might be prevented. When the proportions of bases to silica was as 8 : 10, and, at the same time, employing a blast at the highest attainable temperature, the iron produced had much greater strength, and contained only 1.8 per cent. silicium. When the proportion of bases to silica in the cinder was as 20 : 19, the iron contained only an unappreciable trace of silicium, and the strength was increased in the proportion of 65 to 45. It would appear, therefore, that the inferior quality of pig iron smelted with hot-blast is not to be ascribed solely to the higher temperature which prevails in the furnace, but is owing rather to the ingredients of the charge not being suitably proportioned for preventing the reduction of silica, by having a sufficient amount of lime present. When the maximum amount of lime was used, the consumption of fuel was on the average increased to the extent of six per cent.—*Bulletin de la Soc. de l'Industrie Minérale.*

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



terms. Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Hot Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855.—ly

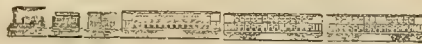
RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
Feb. 1856.
Mar. 25, 11.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

INDIANAPOLIS,

Terre Haute, Lafayette, Chicago,
AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.30 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

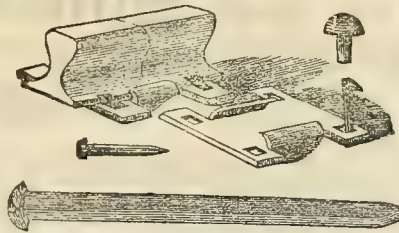
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M. H. C. LORDE, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN

Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio. Please direct name in full.

Feb 25

CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURGH.

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6:20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.

Office, 31 Main Street, west side, 5 doors north Madison House.

Cincinnati, Jan. 31, 1855. [Jan-17] Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, No. 103 10 Wal. ar Broadway, New York.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON, Feb5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

ly23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,

Box 1851, Cleveland, Ohio.

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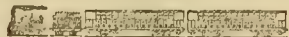
T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,
LOCOMOTIVES OF SUPERIOR QUALITY.
Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.
Jy 27. RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—
JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,
RAILWAY AGENTS

AND
COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.
feb5-ly

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858.

For the Grubbing, Grading, Masonry, Bridging and Cross Ties, for the First Division of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 32 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK, Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.
March 18—2L.

IRON BOILER FLUES PASCAL IRON WORKS.

MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc
Warehouse, 85 South Third St.,
PHILADELPHIA. [aug

RAILROAD IRON.

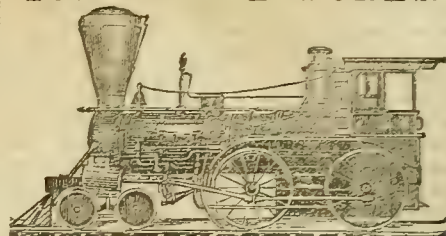
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

H. H. GOODMAN & CO.,
No. 7 Wall St., N.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20

MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and iron Forgings of almost every description, etc., etc., at the OLD STAND.

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited
ALBERT BRIDGES.

Of the late firm of Bridges & Bro
JOEL C. LANE

feb4tf

MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.

These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floors, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 60 feet span, 8,000 lbs. weight, \$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2600 lbs. weight, \$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 52 squares, \$1300, or \$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES.

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc., and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

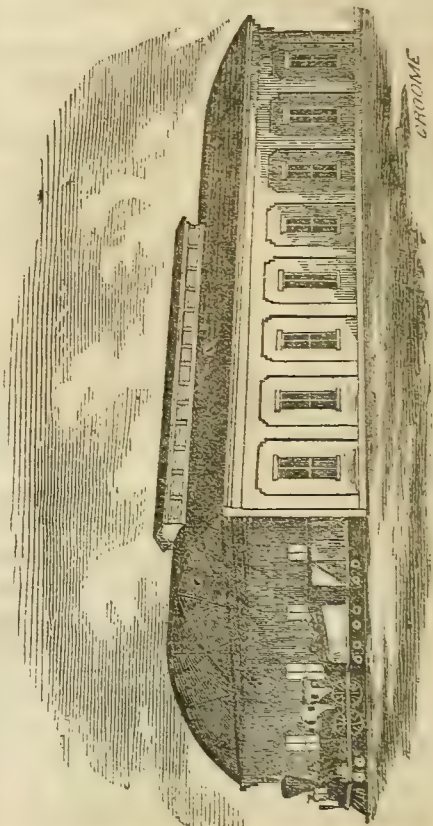
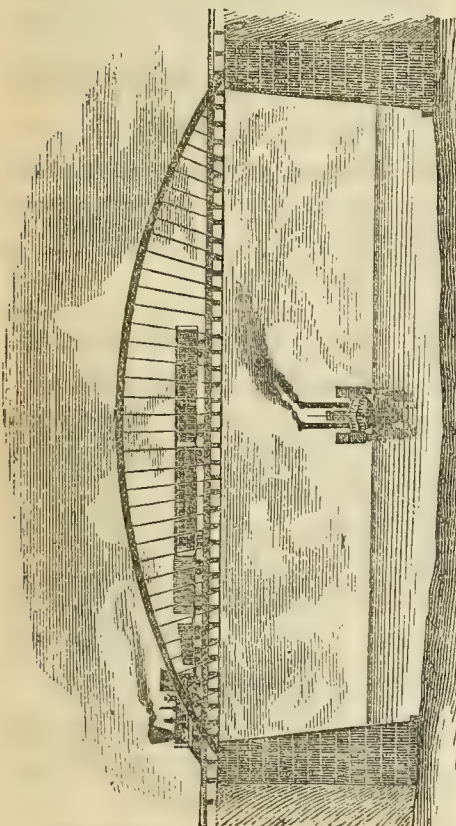
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 66 West 3rd Street, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 18, 1858.—6m.



Most Direct Route to the East.

BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK, BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,
General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FREIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particulars see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

WM. S. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

July 10 Office, Adams Express Co., Third street.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or, by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

J. PECK,
July 10 Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

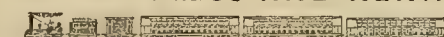
THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

1857. November 30. 1857.

LITTLE MIAMI AND COLUMBUS AND XENIA



RAILROAD.

EXCLUSIVELY AN EASTERN ROUTE. THROUGH TICKETS VIA.

WHEELING, STEUBENVILLE, PITTSBURGH, CLEVELAND, DUNKIRK, BUFFALO, NIAGARA FALLS,

To all the Eastern Cities.

6 A. M. Lightning Express, through to Columbus and Cleveland, without change of cars. 9:40 A. M. Express, through to Bellair without change of cars.

FOUR DAILY TRAINS.

FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern Cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., for Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

FOR THROUGH TICKETS

And all information, at Cincinnati, please apply at Union Office, No. 2 Burnet House, or at the Union Office south-east corner Broadway and Front street, opposite the Spencer House; or at the Eastern Depot.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent.

THE OMNIBUS LINE

Calls for passengers at all the principal Hotels for each and every train. By leaving directions at either of the above offices, they will call for passengers in all parts of the city, without fail.

no 12

H. B. RUGGLES, Conductor.

TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M., and 2:30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS, Acting Superintendent.
If Omnibuses run from the principal hotels, and call on orders left at the Ticket Office.

Omnibuses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,
Ag't Cin. and St. Louis Omnibus L
Office No. 2 Burnet House.

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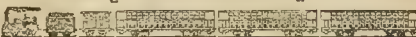
WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of art.

MIDDLETON, WALLACE & CO.,
Jan 8 Jy 119 Walnut st., Odd Fellows' Buildin

1857. Summer Arrangement. 1857

Cincinnati, Hamilton & Dayton [TRUNK LINE.]



RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, PHILADELPHIA, TERRE HAUTE, CLEVELAND, ST. LOUIS, DUNKIRK, LAFAYETTE, BUFFALO, LOGANSPOET, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at City e for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOET EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and sapper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

"STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:15 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Office, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH Agent

WAREHOUSE

No. 5 FRONT STREET

Opposite Public Landing,
Cincinnati, O.

PORTER, ROBE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON"

We have now in operation, at Pomerooy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomerooy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use. HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,
—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,

East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.
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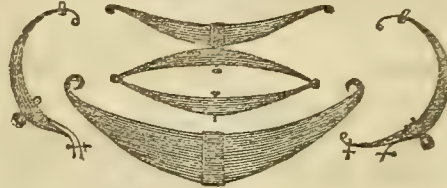
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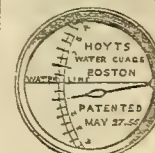
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THURSDAY MORNING, MAY 6, 1858.

Railroad Record

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LAKE ERIE STEAMBOATS.

A contract has been closed between the Michigan Southern and Michigan Central R. R. for the discontinuance of the steamboat lines hitherto run by these roads from Buffalo. The steamboats on these lines cost originally about \$1,750,000 and cannot now be sold for one-fifth that sum. They cannot be run with profit either by the companies or by individuals. This we believe has been the universal experience of steamboat lines, running in competition with railroad lines, and stands in striking contrast with the success of the Lake shore lines running on this route.

☞ The March earnings of the Chicago and Rock Island Railroad were..... \$92,063 70

Expenses	47,077 25
Net earnings	\$44,986 45

VOL. 6.—No. 11

THE RAILROADS OF THE UNITED STATES IN 1858.

In the years 1854, '55 and '56, we gave the whole number of Railroads in the United States. Since then, the progress being slower, we have omitted a specific list. We now avail ourselves of the aid furnished by Dr. FISHER, in Dinsmore's Guide, and other sources of information, to make some comparative tables of the present condition of Railroads in the United States. The number of roads and miles opened in this country on the 1st of January, 1855, as stated in the *Railroad Record*, were as follows:

No. of Roads	435
No. of Miles	18,815

These were distributed as follows, viz.:

New England, (6)	3,137 miles.
Middle States, (5)	5,435 "
Southern States, (5)	3,216 "
South-Western States, (7)	964 "
North-West, (7)	6,348 "

In January, 1858, according to the statement of Dinsmore's Guide, the number was as follows, viz.:

No. of Companies	421
No. of Miles (open)	25,965½

This number is really a little too low. In the North-west there are, perhaps, one hundred miles more than is here given; but, assuming its accuracy, which is quite sufficient for the purpose, we find the increase in number of miles open, to be 7,120 miles. In three years, then, of very great depression in railroad affairs, we find the aggregate number of miles to increase, by 2,400 miles per annum! If such be the case, then, under all the adverse circumstances in which railroad enterprises have been placed, may we not assume that they will increase in the future at a much more rapid rate?

The increase has been precisely in the line of the increase of population—chiefly in the North-west. The increase of the several sections has been as follows:

In New England	480 miles.
In Middle States	458½ "
In Southern States	842½ "
In South-Western States	474½ "
In North-Western States	2,627½ "

The greatest increase has been in Ohio, Illinois, Wisconsin and Iowa.

The increase of the last year has been about 2,000 miles. The largest number of miles opened, in any one year, was opened in 1855, in which about 3,000 miles were made.

The proportion of railroad miles to the surface of the thirty-one States, in which they lie, is about one mile of railroad to each sixty square miles of surface. There are, however, great differences in the proportions in the several states. The following are examples of proportion in those States in which railroads are most numerous:

In Massachusetts	1 mile R. R. to 5 sq. miles.
In New York	1 " " 10 15 "
In Pennsylvania	1 " " 10 15 "
In Ohio	1 " " 10 14 "
In Illinois	1 " " 10 23 "
In Virginia	1 " " 10 46 "
In Georgia	1 " " 10 50 "
In Tennessee	1 " " 10 60 "
In Wisconsin	1 " " 10 85 "
In Iowa	1 " " 10 200 "

In looking over the proportions of railroads to the surface of the country, we are struck by the fact, that three-fourths of all the miles of railroad in the United States are made in States having one fourth of the surface. Now, if we carry the same proportion through the existing thirty-one States, the whole number of miles of railroad will be 75,000. But, if we take into view what will be required for Kansas, Nebraska, Minnesota, Oregon, and Washington, there will be at least 100,000 miles of railroad required; 75,000 miles more, therefore, will be made, and we hazard nothing in saying, that the whole of this amount will be made in the next twenty-five years.

At the end of that time we shall have more than 50,000,000 of people, and a property equivalent to thirty thousand millions of dollars. It is evident, therefore, that such a people and such wealth, can well afford to make all the railroads they need; and as commerce is active and pressing, the roads will be made as fast as they can be. Now, we consider that in 1855, '56 and '57, subsequent to the "letting down" of railroad credit, about 7,000 miles of road have been opened, it is quite evident that railroad progress can not be arrested by temporary embarrassments or financial alarms. It will go on with the general progress of the country.

The great question of financial results; the question—"Will they pay," is very nearly solved, and that, too, favorably to Railroads. This is, no doubt, contrary to the general opinion; but, it is true. We take the general facts as furnished by the *American Railroad Journal*. They are thus:

Cost of Railroads open	\$920,000,000
Gross receipts	\$120,000,000
Net profits	\$50,000,000
" " per cent.	5 per cent.

Now, if in the very beginning and comparatively unorganized state of most of our roads, they pay a net profit of five per cent., may it not be safely assumed that they will pay over six per cent. permanently. We see no reason to doubt, that in the end the railroads of the United States will pay as much as the government of the United States, and the stocks of most roads be as safe. But there are great differences in the condition and prospects of the several companies, according to the advantages of their position, and the prudence of their management. There is a railroad in Ohio which paid 28 per cent. cash dividends last year; and there are two or three others which paid over 10 per cent.; and there are others also which paid nothing. Undoubtedly, then, these differences will exist. They are exactly of the same character and variation, as those which exist in the commercial business of individuals. Taken as a whole, however, railroads are a profitable business; but, particularly so, when considered in its relation to its bearing on the general business and prosperity of the country. If nine hundred millions have been expended

on the roads, is it not a great thing to have one hundred and twenty millions paid out annually by them? And fifty millions paid to the proprietors as a net profit? To us it is more extraordinary that they have done so much, than that they have done so little. It is a great result for the country, and will add thousands of millions to its wealth.

The question of cost in different sections of the country is an interesting one. The proportions of cost in different sections have been as follows:

In New England.....	\$40,000 per mile.
In Middle States.....	41,000 " "
In Southern.....	34,000 " "
In South-Western.....	45,000 " "
In North-Western.....	33,000 " "

The reason of these differences will be obvious to those who understand the surface and character of these several sections of country. The cost of the roads has been greatest in the middle States, because there the great lines cross the mountain chains. On the whole, it is not safe to estimate the original cost of a railroad at less than \$30,000 per mile any where. A road of 200 miles in length over a tolerably level country, may be made for 6,000,000 of dollars; and then another million should be added for equipment and contingencies. Such are the general railroad results in the United States.

TEXAS AND NEW ORLEANS RAILROAD.

This Company was chartered by the last Legislature of Texas, to build a Railroad from Houston to the Louisiana line, connecting that City with New Orleans. It occupies the ground that was designed to be taken by the Sabine and Galveston Bay Railroad and Lumber Co. The present Company have set to work in earnest to build the road. The Houston Telegraph of April 14, gives the following account of the doings of the Company:

"Last Wednesday, the locating corps of engineers started from the initial point of their survey at the east corner of the corporation limits to locate the route. Last Saturday, the contractors arrived with 136 hands, and to-day they have gone to work with the grading. They are to have 100 more hands in a short time.

"These contractors, Messrs. Smith and Wentz, are from Missouri, and are just off from the North Missouri Railroad. They are men of extensive means. They have taken the contract for the whole length of the Texas line, from Houston to the Sabine, for grading and laying the track, and are to push it through with rapidity. The contract for furnishing the iron, deliverable in Galveston Bay are also made, and the iron will begin to come forward as soon as enough of the road is graded to give the track-layers a certainty of continual employment. The intention is, when once they begin to lay down the iron, they will not stop till they reach the Louisiana line.

"The force in the employ of Messrs. Smith & Wentz are regular railroad hands, white men, and are capable of grading on the line of this road about twenty miles per month. It is the calculation of the Company to complete their road and have it in operation to the Trinity river by the 1st of November next, and there is no reason why they should not be able to do it. The distance there is forty miles, and to the Sabine ninety-six."

LEXINGTON AND DANVILLE RAILROAD.

The active and energetic president of this road, Gen. Leslie Combs, issued a circular under date of April 21, in which he called the attention of the Stockholders to their annual meeting held on the first Tuesday in May. As we did not receive the Circular till May 1, we omit such parts as refer to the meeting, and give entire those extracts which show the condition of the road and the difficulties under which it has labored. Our readers will be pleased to see that at least one piece of rascality attempted to be played on a railroad Company has met its merited reward.

An amendment to our charter authorized us to issue seven hundred thousand dollars of first mortgage bonds, in order to finish the road to Danville. Under the advice of experienced railroad financiers, we thought it best to issue only three hundred thousand dollars on the road from Lexington to the Kentucky river—leaving four hundred thousand dollars to be issued hereafter, if found necessary, to finish the suspension bridge and the 12 miles of road to Danville.

Under the first general mortgage, executed on the 4th day of July, 1855, we sold seventy bonds, principally to farmers along the line of the road, including 25 purchased by the County Judge of Jessamine, and some 15 or 20 by the President and two of the Directors.

This mortgage was cancelled and the sectional mortgage executed on the 21st of January, 1857, limited as before stated. We confidently believed that by pursuing this course, we should have little or no trouble in finding purchasers, at fair rates, for the remaining 230 bonds, which would enable us to finish the road to the Kentucky river and leave it wholly free from debt. The present owners of the Maysville and Lexington road, at one time seemed disposed to help us through, provided they could do so on suitable terms; but our negotiations with them proved unsuccessful. We subsequently, on the 19th day of February, 1857, effected a sale to other parties in New York of the whole amount at seventy-five cents on the dollar, including a liberal commission to be allowed them.

Even with this sale effected, on safe terms, inasmuch as the bonds were only to be handed to the purchasers "as paid for," we found it impossible to buy iron rails, unless we would, individually, endorse the notes of the company.

Although sensible of the risk we incurred, we felt it to be our duty thus to stake ourselves for the stockholders, not doubting we should be sustained and saved from loss, in case of accident or disappointment. We accordingly purchased the rails and completed the road to Nicholasville, the county seat of

Jessamine, within ten miles of the Kentucky river, to which point the grading, bridging and masonry have also been finished, and paid for, with the exception of about half a mile at the towers.

After the purchase of the rails, we ascertained that this contract would not be carried into effect, and were forced to make the best arrangements in our power to raise the money to pay our notes, as well as the freight and duties on the iron, which was on its way from New Orleans. Part of it was borrowed from individuals, and the residue from our banks, at the usual rates of interest. To provide for the payment of these loans, we placed some of our bonds for sale in the hands of Messrs. Hewson & Holmes, of Cincinnati, who have afforded us the most valuable assistance in raising money, although unable to sell our securities at the prices to which they were limited. We placed another portion (124) in the hands of a broker on Wall Street, N. Y., (who was recommended to the President as an honest, trustworthy man,) under the following contract:

EXHIBIT A.

Received, New York, May 19th, 1857, from Gen. Leslie Combs, President of the Lexington and Danville Railroad, one hundred bonds, of one thousand dollars each, numbering from one hundred and ninety-nine, to three hundred inclusive, the same being held by me in trust.

Also, on the 5th inst., twenty-four bonds from S. D. Bruce, Secretary of said road, numbering from seventy-seven to one hundred inclusive, said bonds not to be sold for less than sixty-five cents on the one hundred, exclusive of the back interest, to day of payment to said Combs. After paying my acceptances for fifteen thousand dollars for the said Combs, balance to be put to his credit in the Bank of America, or paid to his order, from time to time.

Any overplus from said sixty-five cents to the dollar to pay my commission and all expenses.

[Signed.]

JOHN G. BROWN.

The limit allowed Mr. Brown was below the price at which the 70 bonds had been sold, but all railroad securities were then beginning to feel the monetary storm which soon afterwards swept over the country, and I was assured by him that, at that limit, and with the privileges of negotiation accorded to him, he could certainly supply us with means to meet our engagements. *This he wholly failed to do.* It is true he gave us letters of credit, from time to time, to the amount of sixty thousand dollars, including the \$15,000 mentioned in his receipt, but, although he sold or mortgaged some 35 or 40 bonds, he never paid one dollar of his acceptances, except with money furnished by us, and allowed the remainder to come back protested, all of which we have taken up. So far from aiding us in our struggles to save the road from sacrifice, he has acted upon the common maxim on both sides of the mountains, in the large cities and in the rural districts—that railroad companies, being public corporations, are fair subjects of plunder, and every agent has a right to his share of the spoils. By various fraudulent devices and false pretences, he has endeavored to convert the proceeds of the bonds sold to his own use, without accounting to us for any part; but we have stopped him in his career, and the Courts in New York have sustained us. The unsold bonds are safely deposited in the Union Bank of New York—all the real and personal estate in his possession has been attached, his office has been closed, and his body consigned to the common jail for fraudulent agents and faithless trustees.

It is hoped that the property attached, consisting mainly of a valuable farm, stock, etc., in New Jersey, will save the Company from much loss, beyond the costs and vexation of this unexpected litigation.

We ought, perhaps, to congratulate ourselves that, amidst the general crash or suspension of railroads occurring last year, and the high carnival for thieves and robbers still blighting the land, we should have escaped so well.

Now, *what is to be done?* The stockholders, at the annual meeting on the 1st Tuesday in May, will determine this question. By availing ourselves of the provisions of a recent act of the Legislature, the President and Directors might save themselves from ruin by selling out the road, but this would be a most painful course for them to adopt, after laboring so long and earnestly to make it, for the stockholders. Certainly nothing but the imperious necessity of self-preservation would drive them to such an extremity.

We take leave to make one single suggestion for the consideration of the stockholders. Instead of trying to force sales of our first mortgage bonds to strangers in New York or elsewhere, let them be divided out among the stockholders, who are able to hold them—at fair rates—one-fifth payable in hand and the residue in three, six, nine and twelve months. *In this way, the present debts can be provided for, and the road, forthwith, finished to the river—the verge of Central Kentucky, and within twelve miles of Danville and ten miles of Horrodsburg—thereby greatly increasing its utility, income and value.*

The financial condition of the road, as given by the Secretary and Treasurer, is as follows:

First Mortgage Bonds, Covington and Lexington Income Bonds, Judgments, Claims in Suit unadjusted, Bills Receivable not due, Real Estate in Cincinnati, &c., &c. \$320,507 00

LIABILITIES.

Bills Payable, (bearing interest,) amount of account due Gen. Combs for advances, and balance due two Contractors on last estimate..... 98,111 00

Assets over Liabilities.....\$222,396 00

SOUTH-WESTERN RAILROAD, TENN.

This road is designed to be the South-Western extension of the Lexington and Danville Railroad through Tennessee. Some months ago, the Chief Engineer of this Company visited this city for the purpose of laying the subject of this connection before our citizens. We are pleased to learn now, by letter, that the road is progressing and will be built. This road is entitled to State aid to the amount of ten thousand dollars per mile for every mile of road built. The Directors design to push forward the grading of the first section of fifteen miles as rapidly as their means will allow—then lay the track with the State aid, and proceed with fifteen miles more and so on, till they reach the Kentucky line.

If our railroad companies would regard this matter for a moment, they would see most clearly that every mile of railroad extension in this direction, will bring to them a business for which there can be no competition—no branch lines to carry it over their routes. Its importance, therefore, to them is very great. The same argument applies to our merchants and manufacturers. By aiding the prosecution of this enterprise, they bring

our city into communication with a section of country whose trade and business must come here. Here will be its shortest route, and here will be its natural market to sell its produce and buy its supplies.

PEORIA AND HANNIBAL RAILROAD.—The annual meeting of the stockholders was held at Vermont, Fulton Co., on the 13th inst., when the following Board of Directors for the ensuing year was chosen:

Isaac Underhill, Joseph Ladd, Peoria; Nathan Beadles, John H. Piersol, Lewiston; William K. Johnson, Vermont; Lewis D. Erwin, Rushville; J. F. Hawkins, Hannibal.

At a subsequent meeting of the Board of Directors, the officers elected were as follows:

President, Isaac Underhill; Vice President, Wm. K. Johnson; General Superintendent, W. G. Wheaton; Secretary, A. M. Johnson; Treasurer, John H. Piersol; Chief Engineer, W. G. Wheaton.

Eight miles of the road-bed in Peoria Co., is nearly ready for the superstructure, and five miles in Fulton County. The expenditures, so far, amount to \$37,976.

CINCINNATI, HAMILTON AND DAYTON R. R.

The annual meeting of the stockholders of this company was held on Tuesday of this week. It was pretty well attended. Of the whole number of votes entitled to be cast, nearly two-thirds were represented. The meeting discussed freely various subjects connected with the management of the road, and decided that there should be hereafter semi-annual meetings of the stockholders.

The following is the Board as elected:

S. S. L'Hommedieu; Geo. Carlisle; John C. Wright; John W. Ellis; Geo. H. Hill; Jos. B. Varnum; Jacob Shaffer; Stanley Matthews; E. J. Miller.

The last three gentlemen are new members.

We shall not undertake to give a synopsis of the Report till we have received printed copies of it. The gross earnings of the year have been \$487,421 27, and the gross expenses \$226,658 15.

At the meeting resolutions were passed requesting the Directors to aid and encourage the construction of the Dayton and Michigan Railroad, and that no appropriation be hereafter made for any purpose outside of the legitimate business of the Company, except by the express authority of the stockholders, to be given by a meeting called for that purpose.

A standing committee of three were appointed to examine the books and papers of the Company. This committee consists of John Young, Wm. Goodman, and John W. Hartwell.

MEXICAN GULF & SAN ANTONIO R. R.—This Company has completed five miles of its road, and has twenty-five more graded. It has received 64,000 acres of land from the State.

(Correspondence of Railroad Record.)

THE INTRODUCTION OF CAMELS INTO THE UNITED STATES.

Landing at Indianola, Texas—taken thence to a place near San Antonio, Texas—Arizona, its capabilities and resources and the peculiar adaptation of the camel to their development.

The camels were landed May 14, 1856,* at Indianola, Texas. There they remained some time, and were taken thence to within twelve miles of San Antonio. The object for which they were imported, was the military service in the transportation arm of that service. And bringing them near San Antonio was approaching very nearly the scene where transportation needed great increase of facilities. The camels brought over by Major Wayne were 34 in number, as stated in the public journals—and 33 of them are briefly described in the following enumeration:

- 1 Tunis camel of burden—male.
- 1 Sennaar camel—male.
- 1 Muscat camel—female.
- 2 Siout camels—males.
- 4 do. do. females.
- 1 Mt. Sinai camel—male.
- 2 Bactrian camels—males.
- 1 "Booghdee" or "Tuilu"—male, (produce of the Bactrian male and Arabian female.)
- 4 Arabian camels of burden—males.†
- 15 do. do. do. females.
- 1 Arabian camel, 24 days old (11th Feb., 1856)—male.

The following statement will give very exactly the ideas of that accomplished officer, Lieutenant David D. Porter, in relation to the place for embarking camels from Asia, different descriptions of camels, etc., etc.

No better place than Smyrna can be found for shipping them; and the best can be procured at a journey of seven or eight days from that place.

It would not be desirable to take on board any camels brought up in or about a city, as they are almost always diseased or crippled.

It is from Arabia, that the Persians yearly receive their fine dromedaries which they use for military purposes, and Alexandria is the point from which that country and the southern part of Persia can be most easily reached.

From Alexandria to the head of the Persian Gulf is about eight hundred miles, and it is south of that, in the country of Oman, that the dromedary is procured.

Though much used in Persia, the best are

* Major Wayne's letter of May 14, 1856.

† "The word 'Bactrian' and 'Arabian' applied to the description of the camels embarked, are not used in a *natal*, but in a *specific* sense, to describe the kind of animal according to the division I adopted and uniformly followed. The Bactrian has two humps; the Arabian only one. The 'Booghdee' takes after the mother, and has but one hump. A hybrid, it partakes, it is said, somewhat of the character of the mule, being able to produce only an inferior race."

This note is in Major Wayne's own words.

to be procured in Arabia, and it is found that even in the northern parts of Persia, where it is cold, that the dromedary soon becomes acclimated.

The trip of Major Wayne and Lieut. Porter to the Crimea was highly interesting, but particularly in enabling them to see the "Bactrian camel," the only place easily accessible to them, where they could have seen it. They are magnificent looking creatures, and far superior in size and appearance to the one humped camel, though not so well adapted for hard work. Those seen, on this trip, were in fine condition, even after having passed through a hard winter, living as best they might, and exposed out of door to all sorts of weather. Their humps had in some instances been smashed down, owing to improper loading, but it did not seem to impair their efficiency. Lieut. Porter saw them working in a cart, and otherwise, but not in such great numbers as the other camels, which was evidently much more rapid in its motions, but not so strong.

There will be little difficulty in finding good camels hereafter. All of Asia Minor as far south as thirty-five degrees of latitude, and as far east as forty degrees of longitude, abounds with them and can be easily reached.

Their appearance depends very much on how they are treated. The Egyptians, the most inconsiderate camel masters in the world, have the most wretched looking beasts, while the Turk, more humane in his disposition, keeps his flock in fine order.

In our country they would be of such value to any farmer south of thirty-six degrees, that they would be fostered with the greatest care. A horse is, in the United States, considered a valuable animal, but he will, in point of worth for labor, in no way compete with a camel.

It will be an easy matter, at any time, for farmers to import a pair of them from Smyrna. The whole cost will not be much more than three hundred dollars each.

Of what vast utility would such an animal prove, as we have described the camel to be, in a country such as Arizona, of which the *Nashville Union and American* of April 13th, gives the following account:

"This is the name given to what used to be called the Gadsden purchase. It includes a tract of country embracing almost 27,000 square miles. It is interposed between Mexico on the north, and the Mexican provinces of Sonora and Chihuahua on the South, and extends westward to the Colorado river. An esteemed friend—an officer in the army, who has been stationed in the neighborhood of the Territory, and has repeatedly traversed large portions of it, assures us that it abounds in the precious metals—gold, silver and copper—has many spots of fertile soil, is admirably adapted for the propagation of all kinds of fruit, and especially the grape; and possesses

an atmosphere, which, to use his own words, 'it is a physical delight to breathe.' Colorado City, opposite Fort Yuma, is at the junction of the Gila and Colorado, and at the present head of navigation on the latter river. It is already a place of trading importance, because it is at the only secure crossing place. Population is rapidly flowing into this new Territory. The mining companies last year consumed over one hundred thousand dollars worth of goods, shipped from San Francisco alone, and landed at the mouth of the Colorado. They ought to have ample military protection now."

All this section of country has been surveyed in reference to the practicability of a railroad and found practicable. Any country in which a sufficient supply of water can be found for a railroad, has enough of that necessary to make camel transportation practicable. Capt. Humphreys, an officer of the highest scientific attainments, pronounced it practicable, and went into the details in his Report, proving it to be so. In his Report of November 29, 1855, he says: "The results of the examination, with respect to the supplies of water, make it probable, from the form and geological structure of the basins and plains, that ordinary wells, at distances not exceeding twenty miles, would furnish abundant supplies, distances not too great for the economical working of passenger trains."

The camels traverse plains in Asia and Africa, where, for a hundred miles there is no water, bearing heavy burdens. Here, where the utmost distance from water to water does not exceed forty miles, their labor would be light.

W. A.

Railroads.

MISSISSIPPI AND TENNESSEE RAILROAD.

The report of the President of this Company to the stockholders has lain upon our desk some time, awaiting a notice, we give below the substance. We should judge the road had been managed with strict economy. The President says:

At the date of our last annual Report, we had the track laid to Senatobia depot, 37 miles from Memphis, and a comparative graduation of fifty miles of route.

Since that time, we have finished the incomplete graduation, have done the graduation and bridging of nine additional miles, including a substantial bridge of the "Howe Truss" style, across the Tallahatchie river, and have laid the track upon twenty-two additional miles of road. We now have an operative railroad of the first quality, fifty-nine miles long.

We are now, and have been for several months, letting the graduation and bridging of twelve additional miles to a point south of Yockanapatapha river, twenty eight miles

from Grenada. These contracts are now mainly taken, and are in a fair state of progression.

Owing to the stringency of the money market, and our consequent poor prospect of realizing from the sale of our first Mortgage Bonds at the present time, we deemed it best not to jeopardize our credit by venturing any further at this time.

We deemed it poor policy to attempt too much at once, and have heretofore so controlled our progress as to preserve our credit untarnished.

Railroads are gigantic undertakings, and can only be safe on the stable foundation of actual money.

Our stockholders must not, then, become impatient at the slow, lagging steps of an enterprise that has been crippled from the beginning by want of money.

Its final consummation is certain. The gross income of the first year of its operation will convince the most incredulous of this fact. By reference to the Superintendent's Report, you will see that the receipts from passengers for the year amounted to \$46,151 19; and from freight, \$67,651 55, making in the aggregate \$113,802 74, a gross income of nearly \$10,000 per month, and this the result on an average length of only forty-five miles of road. Construction and tracklaying have been going on during a great portion of the year's business, and no account is made in the foregoing of the expenses of transporting iron, cross-ties, and other materials.

Our estimates for receipts of the next year, amount, in gross, to \$200,000. Our estimated expenditure \$100,000. This, we think, is a fair estimate for fifty-nine miles of road, based upon the actual experience of the last year.

We can now show a finished, operative road of fifty-nine miles, with a net income which insures the payment of the interest of a much larger debt than that required to complete our road. We can now present almost every condition that moves capitalists to such investments. We recommend to the favorable consideration of the people interested, the Branch Road authorized by the Legislature of Mississippi, approved 6th of March, 1856. Owing to the favorable character of the country it would traverse, the greater portion being a dead level, its construction would be unusually low, perhaps not exceeding \$3,000 per mile.

The expenses of organization, salaries of officers, etc., being sustained by the Main Trunk line, nearly all stock subscriptions obtained on the Branch Road could be used in construction. Your Board think that available Stock subscriptions of \$600,000 would justify them in undertaking the work. These stock subscriptions must be raised by the people of the valley.

The Board are willing to give their hearty

and zealous co-operation to any movement made in this regard by the people. Passing through a country—the Tallahatchie and Yazoo Valleys—unsurpassed in productive agricultural resources, your directory think that the construction of this Branch road would contribute essentially to the interest of the Trunk road.

In the mean time we recommend to the people interested, to raise a sufficiency of means to have a preliminary survey of the route taken; \$5,000 would be ample for this purpose. After a thorough and accurate preliminary survey, the route would be fixed in the public mind, and we then would have no controversy among stockholders in regard to rival routes.

Having let out to contract, this coming season, only a portion of the twelve miles of road from Panola to Yokene, and there being little work to do on the fifty-nine miles finished, we recommend a reduction in the Engineering Corps. The Chief Engineer and one assistant we deem a sufficient force to super-vise the road. In case we should be so fortunate as to sell our securities at a reasonable rate, and thus be enabled to put all the remaining portion of the road to contract, we then can increase our engineering force to a number equal to the exigencies of the work. We also recommend special attention to the working expenses of the operative portion of the road. Although much money was expended during the last year in furnishing a machine shop with machinery and tools; much in putting a new road in order and in carrying on construction, yet we deem our expenses high, and believe they can and should be curtailed at least twenty per cent.

To effect this economical purpose, we recommend the abolition of the office of Superintendent of Transportation, and the vesting of his duties and powers in the Chief Engineer.

We likewise recommend the abolition of the office of Track Master, and the vesting of his duties and powers in the Master Mechanic, or the letting out of maintenance of way to contract by the mile, or by divisions of fifteen miles each. The fewer heads of departments we have, the more economical, we believe, will be the administration of the Company.

And as a further provision in the cause of economy, we recommend that a By-law shall be passed by your Board of Directors, requiring monthly reports from your Chief Engineer and Superintendent, and Master Mechanic and Track Master, showing accurately the working expenses of the road each month. The report to be made to the President of the Company.

According to the Treasurer's Report, there is now due to the Company \$118,000 00 of uncollected Stock Subscriptions. In every report we have made, we have appealed to

the pride, public spirit, and sense of honesty of these defaulters, but we have appealed in vain. Although their subscriptions have been due for nearly two years, they still remain unliquidated.

They well know their failure to pay, cripples the energies of the enterprise, makes it progress with tardy steps, when otherwise it would progress with a speed satisfactory to the most sanguine friends of the road. By their failure to pay, the work would long since have been stopped, had not the executive officers of the Company so managed its credit as to be able to borrow money even in the most stringent times. Owing to this fact, and the endorsement of your Company's paper by its executive officers and directors, your enterprise has been continuously and actively forwarded. It is unjust to place these officers in such critical situations. They give their time and energy to the work with small compensation, and that is enough, without calling on them to jeopard their credit and private fortunes for the sake of an enterprise that they are no more benefitted by, than very many men who owe the Company, and will not pay.

To effect the collection of Stock arrearages, the most stringent measures the Charter and By-Laws allow, should be adopted.

We recommend that no discrimination be made, but that all arrearages be enforced in the most summary manner, and that forthwith.

The Treasurer's balance sheet up to Oct. 1st, stands as follows:

Graduation.....	\$287,603 21
Motive power.....	30,925 11
Maintenance of Way.....	29,258 01
Do Cars.....	3,344 81
Discount and Interest.....	115,627 00
Trestle work.....	19,840 83
Cross-ties.....	42,062 49
Right of Way.....	9,595 04
Contingent Account.....	15,518 40
Track-laying.....	26,402 45
Water stations.....	5,057 15
Bridging.....	47,496 06
Turn-ables.....	2,223 04
Iron Rails, Chairs and Spikes.....	430,009 23
Buildings.....	26,700 96
Equipment.....	3,454 00
Conducting Transportation.....	26,313 46
General Expenses.....	15,101 49
Engineering.....	31,673 31
Contracting Engineering.....	4,703 24
Cost of Locomotives.....	50,578 66
Do Cars.....	26,912 67
Cash.....	5,693 17
Bills receivable.....	18,919 25
Ledger Balances, due by Sundries.....	13,847 16
	\$1,338,989 93

Capital Stock.....	\$705,324 53
Bills Payable.....	177,660 73
Tennessee Loan.....	96,000 00
Mississippi Loan.....	141,250 00
Passengers.....	55,472 97
Freight.....	70,144 06
Ledger Balances, due Sundries.....	49,831 64
	\$1,338,289 93

The officers of the Company for 1858 are:
President—F. M. White, Panola Co., Missa.
Secretary and Treasurer—Calvin F. Vance, Memphis, Tenn. **Chief Engineer**—Minor Meriwether, Memphis, Tenn. **Superintendent Transportation**—M. W. Newell. **Attorney**—Thomas W. White, Hernando, Miss.

DIRECTORS.

James Elder, Memphis Tenn.; David S. White, W. B. Dickens, Panola Co., Miss.; Henry Duckery, A. N. McKay, J. C. N. Robertson, De Soto Co., Miss.; S. R. Garner, Nathaniel Howard, Yallabusha, Co., Miss.

Sam. Mosby, Barnett Graham, in behalf of the State of Tennessee.

THE QUALIFICATIONS OF RAILWAY DIRECTORS.

Peculiar influences, as a matter of course, must always exercise their power in controlling corporations either great or small. The important secret is to ascertain which influence is most important, considering all interests, and be governed by that looking to the general good. Railroads are two-fold in their advantages—first, as public enterprises embraced in the great system of internal improvement, and second, to remunerate those who have expended their means in building them. Involving, therefore, as they do so many interests, including also the mutual and implicit confidence, no arguments are wanting to show the importance of having them managed by thoroughly competent directors and other officers. It not unfrequently happens that political or partisan influences are brought too much to bear in the selection of these officials. Sometimes purposes of speculation, or mere self-aggrandizement, may induce certain men to become directors, when their own peculiar interest lie deeper than those of the community or company. Instances of this kind might be substantiated by discreditable facts. There is a truism which asserts—"the laborer is worthy his hire"; and it is equally just that the servant should render an equivalent for his compensation. Men fully adequate to discharge important trusts, are not apt to perform them without remuneration in some shape or other. If not paid directly, they expect to be indirectly, perhaps ten times more than is required to secure competent, faithful agents, whose greater interests would consist in discharging their duties with fidelity and for the good of all. In such cases, then, it might, perhaps, be well to have railways entirely managed by persons thoroughly understanding the nature of their business—selected for these qualifications alone—who, being adequately paid, could afford to give their entire time, services, practical experience, and labor, to the company or companies thus employing them.

In a leading article in that excellent and reliable Monthly—*Hunt's Commercial Magazine* for February—entitled "Railways and their Future," the same topic (considered above) is incidentally treated and similar views are expressed. From this article we select the following paragraphs:

"In American railway management the administration is confined to a Board of Directors, which is generally composed of men chosen for their personal wealth, influence or respectable standing in society. These gentlemen, being usually engaged in active private pursuits, and receiving no compensation for their services as Directors, could not, of course, be expected to devote much time to the affairs of the stockholders. They, however, select from among themselves a President, upon whom devolves the active executive management of the concern. This officer is supposed to devote his entire time and talents to the service of the company, and receives accordingly a suitable compensation.

Unfortunately the salary attached to this office is tempting enough to make it attractive to some one of the many very respectable old fogies who turn up in every community whenever a comfortable pension is in prospect; and in nine cases out of ten, through a little electioneering management, the post is secured to some excellent individual without the remotest reference to his personal fitness for the important and responsible duties assigned him. Extraordinary as the fact may be, it is a matter of everyday occurrence in railway history, that, in the choice of Directors and Presidents, stockholders ignore all the rules that govern human action in other departments of life, and readily place their vast interests in the charge of men utterly devoid of the first elements of railway knowledge, and unqualified by age, previous education and pursuits to attain them. As a natural consequence, on such a road the President is dependent upon, and really controlled by, a corps of subordinate officers and agents, who, having no direct responsibility to the stockholders, feel neither pride nor interest in the skillful management of its affairs. * * *

Indeed, it is not perhaps too much to say that the responsibility for the failure of many railroad enterprises to reward "the promise of their dawn," is justly chargeable to boards of Directors who have confided (either from ignorance or improper motives) the chief executive administration to men totally incompetent for the peculiar duties of the station. Scores of men can be found to-day, scattered in various positions over the roads of the country, who have the ability and knowledge which, placed in the executive chair, would soon gladden the hearts of stockholders with far different results than those generally chronicled in the journals of the day. We enlarge upon this point, for we believe that herein lies the key to a great practical reform in railway management.—The Presidency of a railroad company is not a cushioned easy chair for indolence to loll in for the enjoyment of a comfortable nap, but is, or should be, emphatically the post of action. With sound judgement, quick perception and fair administrative talent, the executive of a railway should combine mercantile method and attention to detail, with active business habits, and should exercise a sleepless vigilance over the whole operations of the company, in all their varied relations.—*Baltimore Patriot*.

At the half-yearly meeting of the shareholders of the Great Western of Canada Railway, held in London, England, on the 7th inst., the Chairman, Mr. R. Gill, stated.

That the Government of Canada had made known their readiness to let the Company pay off the Government loan by two installments, and already, by the conversion of bonds, the Directors were enabled to make an arrangement to pay off a sufficient amount to admit of a large saving of the interest now paid to the Government. If a similar amount could be raised in the same way and paid over to the Government in July next, the total saving would be £40,000 a year. A letter from the managing Director in Canada stated that there was no hope of the traffic this Spring, but that there was every prospect that in the Summer and Autumn the revival of trade in Canada and the United States would produce improvement. He urged the conversion of the Government debt into preferential stock, and said the prospects of the line were never brighter. A resolution

was carried that guaranteed personal debenture stock be issued to extinguish the debt to the Provisional Government of Canada, with or without the option of conversion into shares, as may appear most expedient to the Directors.

"The report states that the traffic for the past half-year, as compared with the corresponding period of 1857, showed a decrease of £82,248 3s. 8d., which is only £12,524 6s. 5d. less than the previous six months. After some discussion, the report was unanimously adopted.—*N. Y. Tribune*.

SOUTH CAROLINA RAILROAD.

We have been permitted to look over the report of the management of this road for the past three months. From this we glean the following items of information. The income of the road for the three months was as follows:

Freight.....	\$953,945 59
Passage.....	113,601 33
Mails.....	12,750 00
Minor Sources.....	4,944 24
Incidental Sources.....	4,655 93
Total.....	\$419,927 00

This was applied as follows:	
Current expenses.....	184,643 22
Interest, Damages, &c.....	68,984 41
Decrease in indebtedness.....	139,006 12
Negroes.....	4,239 68
Locomotives.....	9,475 00
Paid for Railroad Iron.....	18,578 65
Crossing Savannah River.....	5,000 00
Total.....	\$419,927 00

This exhibit shows the following results as compared with the corresponding three months of the preceding year.

Increase in Down Freight.....	\$17,419 25
Increase in minor sources.....	1,404 59
Decrease in Up passage.....	\$18,853 84
Decrease in Down passage.....	14,773 09
Decrease in Up freight.....	14,169 23
Decrease in Down freight.....	16,644 26
Total.....	\$45,606 55

Difference in favor of the three months of 1857.....\$26,752 72

The receipts of Cotton for March, 1857, 25,678 bales; for the same time in 1858, 48,464 bales; for three months 1857, 113,268 bales; for the same time 1858, 131,725 bales;—difference in favor of 1858, 21,455 bales.

The receipts of produce at Charleston for the past three months were as follows:

Cotton, 134,723 bales.	
Merchandise, 2,601 bales.	
Grain, 26,817 bushels.	
Flour, 35,507 sacks.	
Naval Stores, 1,577 barrels.	
Live stock 4,368 head.	

It will be observed that the decrease in the above comparative statements is principally in the up and down passage receipts, showing the effect of the late financial pressure. Many could not afford to travel for pleasure, and business trips were more or less restricted. The decrease in the up freights shows caution in the purchase of merchandise, the natural result of commercial embarrassments. Taking all things into consideration, the report may be considered satisfactory.—*Carolina Times*.

THE PANAMA RAILROAD—ELECTION AND CONTRACT.

At an election held at the office of the Company, No. 88 Wall street, in the city of New York, on Monday, April 5, the following gentlemen were elected directors of the Panama Railroad Company for the ensuing year:

Wm. H. Aspinwall, Edwin Bartlett, Henry Chauncey, Henry A. Coit, Samuel W. Comstock, Edward Cunard, Wm. Fellows, David Hoadley, Governor Kemble, Theo. W. Riley, John Steward, Jr., Isaac Townsend, Wm. Whitewright, Jr., The new members are Messrs. Edward Cunard and Theo. W. Riley.

We understand, (says the *N. Y. Herald* of April 7,) that arrangements have been made by the British Government to open a channel of communication with its Pacific squadron by way of Panama, and that supplies intended for that branch of the British naval service will go forward by the new route. Both men

and materials have already cleared for the Pacific, via the Panama Railroad. We may mention in this connection that reliable advices have been received from England by the last steamer, announcing the consummation of an arrangement between the Royal Mail Steam Packet Company of London, the Pacific Steam Navigation Company of Liverpool, and the Panama Railroad Company of this city, by which through receipts and bills of lading will be given for merchandise, packages and parcels destined for the various Pacific ports within the operations of the Pacific Company, thus saving all costs and charges on the Isthmus. The amount of this saving to shippers, independent of any collateral advantages of safety and dispatch, will be at least £2 8s. per ton, and upon small packages relatively much more than this amount.

MEXICO AND HER PRECIOUS METALS.

The *New York Herald* of March 23 contains a synoptical view of Mexico, divided into chapters under appropriate headings, from which we copy the subjoined, relating to her metals:

"To judge by the amount of the coinage of the several mints of the Republic, the extraction of the above precious metals made within the last three years has been somewhat less than what was made in former years. In this respect the expectations of those who thought that the very contrary would be the case whenever the price of quicksilver should come down, have been completely disappointed, for the price of that article has in fact fallen more than one-half of what it formerly was. The total amount of coinage of gold and silver during the year 1855 was as follows:

	Gold.	Silver.	Total.
Culiacan.....	\$144,208	\$737,963	\$882,176
Chihuahua.....	17,535	475,500	493,035
Durango.....	73,647	609,171	682,818
Mexico.....	155,263	4,613,359	4,768,622
Guantanamo.....	555,200	4,698,800	5,254,000
Guadalajara.....	10,368	682,692	693,060
San Luis Potosi.....	.....	1,849,795	1,849,795
Zacatecas.....	.....	3,619,000	3,619,000

If we add to this sum six or six and a half millions of dollars, which, according to the best authority, is annually assayed, and which is exported in bars by the coast of the Pacific, either with the knowledge of the Government or fraudulently, it will appear that the produce of the gold and silver mines in Mexico amounts to 24,000,000 of dollars annually.

IRON.—There are abundant mines of iron in various parts of the Republic, but very few, if any, of them are worked.

COPPER.—It is the same with this metal as with iron. There are numerous mines of the metal, but very few of them are worked. The principal were in Chihuahua, which, however, have been abandoned in consequence of the invasion of the barbarians, (the Indians.) There are some which are worked at Santa Clara, (in the State of Michoscan,) at Mazapil, (State of Zacatecas,) and at Zomelahuacan, and at Vera Cruz. The richest of these are the mines of Mazapil, which yield annually from 4 to 5 and 6,000 quintals or cwt.

MERCURY.—At the present time all the mines of this metal are abandoned, in consequence of the low price of the metal which is brought from California, and which is sufficient to supply all that is wanted for consumption. Five or six years ago there were several mines which were worked. The principal of these was that of Guadalupe, which yielded several thousand quintals

annually. But the low price of the California article has shut up all the mines.

With respect to other mineral substances, we have no accurate information of the amounts which were extracted from the mines. We may, however, believe that it is very trifling, not amounting in value to more than two million dollars. If this amount be added to the value of the gold and silver, it gives as the result the sum of \$26,000,000 per annum, as the total amount and value at the present time of the mineral wealth of Mexico, or New Spain."

SALE OF THE COLLINS LINE OF OCEAN MAIL STEAMERS.

The steamers Adriatic, Atlantic, and Baltic, of the Collins Line, were sold on Thursday, the 1st of April, 1858, at their wharf at the foot of Canal-street, New York. The U. S. District Attorney gave notice before the auction commenced, that the General Government had a lien upon the steamers to the amount of \$115,500. A notice was read from the Board of Supervisors that the city had a claim of \$39,000 for the taxes of 1856-7, upon the company, and that the Atlantic was held for the amount. Capt. Briggs announced that the hands attached to the steamers had also a claim of \$3,000 against the company. A counter proclamation was made on behalf of the line, that all the claims of the United States Government had been duly satisfied, and that the tax claim of the city was unauthorized. A further announcement was then made, that Messrs. Clarkson N. Potter, and J. N. Brown had a liability of the company of \$500,000, dated May 1. 1855, drawing interest from Nov. 1 1857, also a mortgage dated Nov. 30 1857, to secure the claim. The three steamers were purchased by Dudley B. Fuller, Esq., (as agent for other parties,) for \$50,000. The terms were 20 per cent on the spot, and the remainder on the next day.

What is to be the final disposition of these steamers has not yet been announced, but it appears to be probable, if not certain, that they cannot be kept in successful operation between New York and Liverpool without government subsidy. The amount which our government expends in maintaining American ocean mail steamers is much less than is paid by either Great Britain or France.

On p. 629 of this number of our Magazine we have given a statement of the amount which Great Britain pays annually to her lines of steamers for conveying the mails to her colonies and to foreign countries. The aggregate sum is about five and a half millions of dollars a year. The Cunard line receives a much more generous subsidy than the Collins line hitherto enjoyed.

The French Government is establishing a system similar to that of Great Britain, with most liberal allowances for mail service.

In noticing this sale, we quote from the *New York Shipping List* the following judicious remarks, which are well worthy of the attention of Congress, and which, we believe, express the views of a large portion of the mercantile community:—

"In the discussions which have taken place with respect to the contract of the Collins line of steamers, we think that all the considerations have not been fairly weighed. The main argument recently adduced in favor of an abandonment of the contract with that line, is that the whole ocean mail service ought to be abandoned, unless its receipts equal its expenses. But we cannot agree to the position that this is a question of merely dollars and cents, any

more than we can assent to that reasoning which makes the whole question turn upon the supposed importance of having our mails carried in American vessels. The former argument may appeal forcibly to our love of economy, and the latter to our national pride, and it may be proper and becoming that we should duly acknowledge the force of each appeal, but still there are more important considerations, which ought to weigh in the determination of such questions.

"The principal inquiry, we think, ought to be—not whether, as a business transaction, a particular line will pay the government; nor whether without government support the service would fall into the hands of English or American capitalists; but whether the general interests of commerce are to be advanced by the aid which is sought. Although the fate of the Collins line may now be virtually settled, still we think it our duty to urge that more liberal views should be taken in determining the general policy to be in future adopted by Congress on this subject. We have no intention of inquiring into the necessity or advantages of any other lines, but we trust that all such circumstances may be allowed their full weight, when Congress is called upon to determine whether the Government aid shall be given or withheld, and that an important question like this may not be decided in a too narrow spirit of economy.

"If we are ever to adopt a system of ocean steam communication like that of the European commercial powers, the present is an occasion which calls for such assistance. If such a system is not to be adopted, we should be prepared with some further expedient for saving that which we are likely to lose by the superior activity of others.—*Hunt's Mag.*

LAKE SHORE ROAD.—The Wisconsin Lake Shore Road was caught during the late crisis with a floating debt of \$184,000 which is being carried at onerous rates of interest. The Company now propose to fund this sum and to retire about \$240,000 of the stock by a second mortgage for \$400,000 in 8 per cent. bonds, to be paid for in the proportion of 40 per cent. cash, and 60 per cent. of surrendered stock. The circular of the management says:

"Should the subscription exceed the amount of the loan, the stockholders' subscriptions shall be first awarded at the ratio of \$1,000 of the new Bonds for every twenty-five shares owned; the remainder shall be awarded pro rata to the bidders.

The report above referred to shows the receipts to have been for the year 1856.....\$221,249
Receipts for the year 1857.....25,225
Net earnings of steamboat Traveler & Co.....16,143

Total.....\$45,619
Transportation expenses, deducting materials on hand.....185,432

Total net earnings in two years.....\$267,187

Or for one year.....\$133,593

The present coupon account of the Company amounts now per annum to.....\$46,000
The issue now proposed, \$400,000, at 8 per cent. is.....32,000

Total.....\$78,000

To this may be added the annual payment of \$35,000 to the Sinking Fund for the redemption of the first mortgage of \$400,000. This payment is considered binding upon the Company, although the inability to pay does not expose the road to foreclosure. The coupon account previous to this issue, say \$46,000, was only 21 per cent. of the receipts,

This small percentage insures the value of the new issue. From the two first years business, those familiar with the road, its locality, condition and prospects, judge the security unbounded. As far as the stockholders are concerned, it is observed that cash dividends must for sometime be deferred; in the meantime, stock dividends to the amount of the reduction of the debt will probably be declared; but, in the present arrangement, they are offered an opportunity to improve their position in a palpable manner. For instance:

Paying for \$1,000—6 shares costing 70.....\$420
And cash.....400

The new bond of \$1,000 will cost.....\$820

Thus constituting an investment of about 10 per cent. in a security considered quite safe; but combined with the present low quotation of about 30 for shares, this subscription to these bonds is certainly deserving of the attention of capitalists as well as shareholders.

THE NEW ORLEANS AND JACKSON R. R.

The contest between the rival tickets for Directors of the New Orleans and Jackson Railroad, at the election on Monday, was quite spirited and exciting, and resulted, as our readers already know, in the triumph of the "Extension ticket." The vote stood:

For Extension.....25,160 shares.
For Non-Extension.....16,057 "

Majority.....9,103 "
Split tickets not counted.....1,510 "

The following are the names of the new Directors elected:

LOUISIANA.

John Calhoun, George W. Christy,
N. C. Folger, J. M. Reid,
Chas. M. Waterman, Richard Swain,
James H. Caldwell, H. M. Summers,
S. F. Slatter, Thomas Murray,
Charles Pride, Johnson Armstrong,

MISSISSIPPI.

Wm. McWillie, E. H. Saunders,
F. Zollicoffer, R. D. Brown,
E. D. Brower, C. S. Tarpley.

The Picayune says:

Forty-six thousand shares were voted on. The books of the Company show some sixty-three thousand shares. The Governor of Mississippi voted upon above seventeen thousand shares.

The average vote for the non-extension ticket was 17,572; for the extension ticket, 25,160. Average majority for the extension ticket, 7,588.

Some split tickets were cast, which increased the vote of two gentlemen some three or four hundred, diminishing others to the same extent.

TERRE HAUTE, ALTON AND ST. LOUIS R. R.—The following figures exhibit the earnings of the Terre Haute, Alton and St. Louis Railroad for March:

Passengers.....\$32,165 58
Freight.....31,084 65
Miscellaneous.....8,725 00

Earnings for March, 1857.....\$72,975 38

Increase.....71,503 77

TEXAS CENTRAL R. R.—Nearly forty miles of this road is graded.

MILWAUKEE & MISSISSIPPI R. R.—This company has issued a circular with reference to the disposal of an issue of its bonds; the circular says:

The assets on hand, consisting of debts due, unpaid stock subscriptions, farm mortgages, &c. (and not including materials on hand applicable to operating the road,) amount nominally to \$210,000—of this a small portion only can be made available during the present year, and no more than one-half will ever be realized by the Company.

In order to provide for the payment of this debt, unexpectedly so large, the Company have executed a mortgage upon the whole line of road, and all the rights and property appertaining thereto, for \$1,800,000, subject to the previous mortgages, amounting to \$3,750,000.*

The first issue of bonds under this mortgage amounts to \$500,000, dated March 15, 1858, bearing 8 per cent interest, and payable in four years thereafter. These bonds are set apart for the payment of the Floating Debt, and can be used for no other purpose whatever. All the net receipts, after paying the interest and Sinking Fund, are, by the terms of the mortgage, pledged to the payment of this first issue of bonds. At the close of the year the surplus net receipts are to be placed in the hands of the Trustee, named in the mortgage, Thos. L. Ogden, Esq., who is to invest the same, upon due notice, in the purchase of this class of bonds, and in like manner, from year to year, until the whole are retired.

The residue of the bonds (\$1,300,000 are reserved for the payment of the 7 per cent Construction Bonds, \$448,000 payable in 1859, the City Bonds, \$234,000 payable in 1860, and the Second Mortgage Bonds \$600,000 payable in 1862. These bonds can be used for no other purposes than as here expressed.

The construction account being closed, we can only look to the receipts to operate the road, and keep it in necessary repair.

The amount of interest and sinking fund to be paid, previous to the setting aside of any receipts to pay the first issue of bonds authorized by these resolutions, is \$486,000, and in order to arrive at the value of these bonds, it is important to ascertain what the road will probably earn during the present and succeeding years.

MONETARY AND COMMERCIAL.

The past week having been the one in which the payments of the first and fourth of the month occur, has been marked with greater stringency than those immediately preceding. The demand for money has been active; yet, nearly all the good paper offered has been taken at regular rates by the discount houses from their customers. Outside operations are carried through with greater ease, and rates are tending lower. We quote regular rates at 10 to 12 per cent. Street rates at 12 to 15 and 18 per cent. Lenders, however, scrutinize paper offered with considerable closeness, and none but good names can be taken at the above rates.

The course of exchange on the East has been somewhat different from what the usual rates of business would indicate. The purchases of western merchants have been lighter than usual, and the amount of produce going forward fully equal to an average. Exchange should, therefore, be lower. On the contrary,

* Of this amount \$134,000 have been retired by the Sinking Fund.

it has been sustained at $\frac{1}{2}$ buying to $\frac{3}{4}$ prem. selling. This has required considerable effort on the part of the bankers, and has resulted in their leaving pretty large balances in New York. We quote rates as above, $\frac{1}{2}$ prem. buying to $\frac{3}{4}$ and $\frac{1}{2}$ premium selling.

The project of a Central Clearing House in this city, proposed some weeks ago, has met with favor, and a convention of the Bankers of Ohio, Indiana and Kentucky is now assembled. We annex the following remarks on this subject from the Cincinnati Gazette:

This is a movement of no ordinary importance to the Banks of the three States represented; as their future prosperity will depend, to a great extent, upon the result of this Conference. In order to succeed in establishing and carrying out the proposed system, the plan must be well matured, wisely arranged and of a thorough character. Half-way measures will not answer. Anything short of a Clearing-House, established by the Banks, upon bona fide capital, and conducted by the Association for the benefit of the whole, without partiality, or a failure to carry out the provisions that govern such institutions in New York and elsewhere, must fail inevitably, and that right early. Better far do nothing at all, than, having undertaken the enterprise, to stop short of a perfect system.

The time is a favorable one to inaugurate the system. The money market is easy; exchange is dull and comparatively low, with a still lower range in prospect. Other circumstances are also on the side of the banks. The managers of the various institutions, or at least a large majority of them, are fully impressed as to the importance of becoming associated in this business of self-protection. There is a disposition to lay aside the unpleasant feelings that have grown out of the guerrilla warfare heretofore carried on, to some extent, by the banks of one State upon another, and to unite in an effort to establish a wise and judicious system of redemption, to take place of the irregular and expensive mode of doing business that is now practiced. The business community, too, are thoroughly awake to the importance of the proposed system, and the banks may confidently rely upon the active and cordial co-operation of the mercantile and manufacturing interests.

On the other hand, if the Banks fail to avail themselves of the opportunity now presented, for carrying into effect the proposed plan, they will become more effectually divided among themselves than heretofore; and when they make an outcry, hereafter, against the assorting houses, they will receive no sympathy whatever. There must be either a clearing house, or assorting brokers, and it is for the Banks to say which they will have. If they fail to establish the former, the latter will continue to exist, and their operations, will become more annoying, as the business of the country increases, and the facilities for reaching the Banks improve.

The movement, if carried out in an adequate manner, will result in matters of great importance both to this city and the west. Cincinnati, as the great central mart of the Union and the metropolis of the Ohio Valley, presents advantages for the transaction and interchange of business superior to those of New York. A suitable clearing house established here, and possessing the confidence of the banks of these three States, would enable our business houses to conduct their interchanges of balances by drafts on Cincinnati instead of New York. This would be true policy to them as being at a point more easily reached, and capable of being more closely watched than New York. As far as the west is concerned, New York is in a foreign country, and exchange on New York is exchange on a city whose interests and sympathies are foreign to those of the west. A western Clearing House would be a home institution, and could be made one of great service. We hope to see it established, and that its policy will be a wise and liberal one.

SALES AT THE NEW YORK STOCK BOARD—May 3.

\$1,000 Ohio State 6's, '88	101½
7,000 Tenn. State 6's, '90	79½
22,500 Virginia 6's, '90	92
15,000 Miss. 6's	83½
1,000 Erie 1st Mort. Bonds	96½
5,000 Reading Bonds, '86	67½
2,000 Ill. C. B.	85
1,000 Hud. 1st Mt. B.	100
2,000 Harlem 2d Mt. Bonds	72
14,000 La C. & Mil. Gt. B.	32
500 Cal. 7's	84½
40 Pacific Mail St. Co.	80½
691 Shares New York Central	90½
300 " Erie R. R.	25½
75 " Hud. River R. R.	31½
10 " Harlem R. R.	12½
2000 " Reading	49
70 " Mich. Cent.	63½
75 " Mich. S. & N. Ind.	27½
10 " Mich. S. & N. Ind. pref.	53
200 " Panama	108
20 " Clev. & Pitts.	14½
200 " Galena & Chicago	91
200 " Cleveland & Toledo	45½
150 " Chicago & Rock Island	80½
250 Shares Milwaukee & Miss.	32
300 " Del. & Hudson C.	105

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, on the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with parties equipment of Furniture, League Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the first of August—the policy of letting the remainder of 24 miles of the Road to the Junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 250,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trellising B. M.; 2,500 yards Flare Masonry; 1,000 yards Arch Masonry; 2,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—another 4,000 yards masonry and 1,500 feet bridging. 44 miles of Iron, 60 lbs. to the yard, with Chain, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.

Wm. B. M'NEFORD, President.

Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO.

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Marketst.,

1 1/2 NEWARK, N. J.

Racine and Mississippi Railroad.

THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup't.

Racine, May 15, 1857.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work finished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

WOODRUFF'S PATENT SLEEPING CAR,

AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

The attention of Railroad and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.

G. R. DYKEMAN, N. Y.

O. W. CHILDS, Syracuse, N. Y.

J. S. MILLER, Litchfield, Illinois.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.
Feb. 16th J. DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish
SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of
Steam Vessels, Engines, Boilers, Mill Work, &c
Particular attention given to the superintending of
LOCOMOTIVES, TENDERS, CARS.

And Railway Machinery of every Description

While under construction.
AGENT FOR THE PURCHASE OF, on commission
all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for
ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES
METALLIC SELF ADJUSTING CONICAL PACKING,
DUDGEON'S HYDRAULIC JACK

Also, for Water Gauges, Indicators, Steam Whistles
CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

No. 1

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 208 H Street, Washington, D. C. April 2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—'y

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
Feb. 1858. VOSE, LIVINGSTON & CO.,
Mar. 25, 1858. 9 South William St., N. Y.

INDIANAPOLIS, Terre Haute, Lafayette, Chicago, AND THE NORTH-WEST.



INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Panna, Peoria, Duane, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

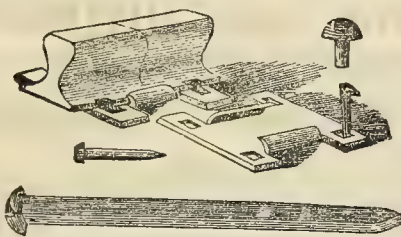
Also corner Front & Broadway, opp. Spencer House, E. F. FULLER, Ticket Agent; No. 2 Burnet House, A. HAMILTON, Ticket Agent. Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN

Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.
Please direct name in full.
Feb 25 CORBY, GOSSIN & CO.

Shortest Route to Indianapolis, Chicago, and St. Louis, by Indianapolis & Cincinnati Railroad.

VIA LAWRENCEBURG,

IN connection with the Ohio and Mississippi Railroad. Passenger Trains leave Cincinnati at 4.45 A. M., 1.55 P. M. and 4 P. M., connecting with Terre Haute, Lafayette and Peru for afternoon and evening Trains. The 6.20 and 2 P. M. Trains, both connect through via Terre Haute and Vincennes, for Evansville, Cairo and St. Louis, and in advance of all other lines.

Baggage Checked to Chicago.
Office, 31 Main Street, west side, 5 doors north Madison House.
Cincinnati, Jan. 31, 1855. [Jan-17] Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
no 13 10 Wal ar Broadway, New York.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap3 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
Feb 5-11 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

July 23-1m

D. M. CARHART.

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,

Respectfully Yours,

D. M. CARHART.

oct29-6m

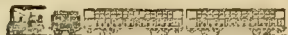
Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

Or SUMNER SMALL, Boston, Mass.

op8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

NOTICE TO CONTRACTORS.

SEALED PROPOSALS WILL BE RECEIVED at the Engineer's Office in Greenville, until 12 o'clock M. on

THURSDAY, APRIL 1, 1858,

For the Grubbing, Grading, Masonry, Bridging and Cross Ties for the First Division of the Cincinnati and Mackinaw Railway, from Greenville to Celina, a distance of 22 miles. Bids may be made by the cubic yard, by the section, or for the whole work, the Company reserving the right to reject any or all bids.

Plans, profiles and specifications can be examined at the Engineer's Office on and after March 20.

All bids must be marked on the envelope—PROPOSAL.

H. A. FRINK,

Chief Engineer.

GREENVILLE, Dark Co., March 5, 1858.

March 18—21.

IRON BOILER FLUES
PASCAL IRON WORKS.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 85 South Third St.,

PHILADELPHIA.

|>02

RAILROAD IRON.

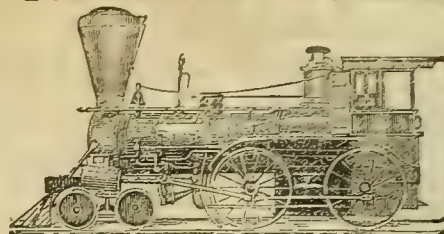
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

J. H. GOODMAN & CO.,

no. 7 Wall st., N.

Feb. 7, '56-2m.]

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings.

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an Iron Forging of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES.

Of the late firm of Bridges & Bro

JOEL C. LANE

feb4tr

MOSELEY'S

Tubular Wrought Iron Arch BRIDGES AND ROOFS.

These Bridges and Roofs have now been fully tested in this vicinity, and it is

UNIVERSALLY CONCEDED

that they can not be excelled.

The Roofs, (rafters, ribs and sheeting,) are wholly of wrought iron; also, the Bridges, except the floors, which are wood like other bridges

I am prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridge, 60 feet span, 8,000 lbs. weight, \$17 50 per foot.
Common Road or Turnpike, 50 feet span, 2600 lbs. weight, \$5 75 per foot.
Roof, 50 feet wide, 100 feet long, 52 squares, \$1300, or \$25 per square.

Increase of span of Bridge, or width of roof, makes an increase of price per foot of bridges, or square of roof.

RAILROAD AND OTHER COMPANIES.

Purchasing the right to use the structures, can construct their own work as easily as to repair an engine, and by the same men, tools, etc.; and in that case the structures will not cost more than one-half or two-thirds the above prices.

I can furnish any quantities of iron of the proper sizes and shapes, at low rates to Companies, etc., doing their own work.

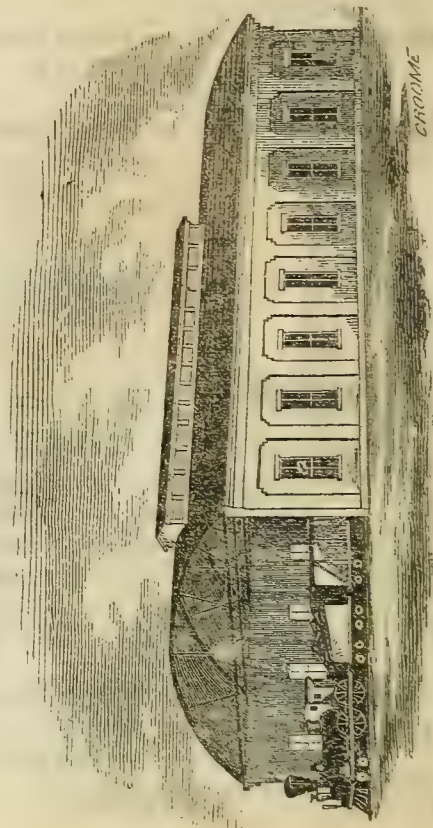
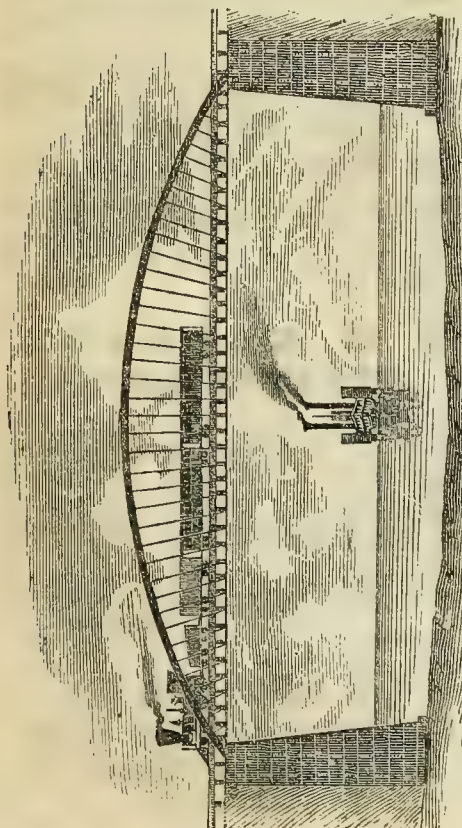
To build these structures, not half the time is needed that wooden ones require; nor do they require more than half the masonry and foundations.

I wish to sell my patents in France and England, and several States at home, and to Companies—all on very reasonable terms; and if it is desired, I will take an interest in each manufactory in the several States. All the work and materials warranted.

Please call on or address me at No. 66 West 3rd Street, Cincinnati, Ohio.

THOS. W. H. MOSELEY.

March 18, 1858.—6m.



Most Direct Route to the East.

BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26½ hours, and to Washington is but 27½ hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street, No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

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General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

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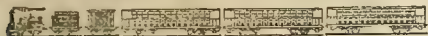
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CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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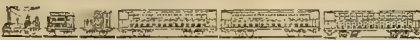
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1857. November 30. 1857.

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To all the Eastern Cities.

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FIRST TRAIN.—Cleveland, Pittsburgh, Steubenville, and Wheeling Lightning Express, leaves Cincinnati at 6 A. M., for all the Eastern cities; also Springfield.

This train stops between Cincinnati and Columbus at Loveland, Morrow, Xenia and London only.

SECOND TRAIN.—Cleveland Express Mail, leaves Cincinnati at 9:40 A. M., or Dunkirk, Buffalo, New York, Boston, &c., Wheeling, Baltimore, Philadelphia, Washington City.

This train stops at all points between Cincinnati and Columbus.

THIRD TRAIN.—Columbus accommodation, leaves Cincinnati at 4:20 P. M., arrives in Columbus at 9:55 P. M., and connects with trains for Steubenville, Pittsburgh, Wheeling, Washington City, Baltimore, Philadelphia, New York, &c.; also, Springfield.

This train stops at all points between Cincinnati and Columbus.

No train on Sundays.

Trains run by Columbus time—7 minutes faster than Cincinnati time.

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E. F. FULLER, General Ticket Agent.

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FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.

FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

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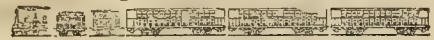
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1857. Summer Arrangement. 1857.

Cincinnati, Hamilton & Dayton

[TRUNK LINE.]



RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR

PITTSBURGH, INDIANAPOLIS, TERRE HAUTE, ST. LOUIS, LAFAYETTE, LOGANSPORT, NIAGARA FALLS, CHICAGO, NEW YORK, BOSTON,

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connect at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M. for Toledo and Chicago. Also connects at Sandusky with

"STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:30 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:15, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent

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W. H. SMITH, Agent

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PORTER, ROBE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON"

We have now in operation, at Pomerooy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for sale. Also, a full assortment of the Pomerooy Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

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WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,
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No. 112 MAIN STREET,East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.RAILROAD AND OTHER BLANKS,
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(Successors to JACOB ERNST.)
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Locomotive Works,

SCHENECTADY, N. Y.

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LOCOMOTIVE ENGINES,
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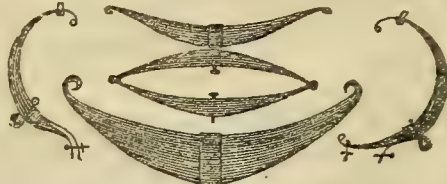
generally, with the utmost promptness and despatch and in the best style.

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JOHN ELLIS, Agent.
WALTER McQUEEN Supt. Aug 16. 17

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LOCOMOTIVE AND CAR SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

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References.

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I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19

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EITHER SINGLE OR DOUBLE PLATE.
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Most Reasonable Terms.

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PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, MAY 13, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

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WRIGHTSON & CO.,
Publishers and Proprietors,

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MILWAUKEE AND LA CROSSE RAILROAD.—

The suit of this Company against N. Cleveland, its former contractor, has been abandoned.

NEW ORLEANS, JACKSON AND GREAT NORTHERN RAILROAD.—The following is the ticket elected at the recent contested election for Directors of this road. John Calhoun, N. C. Folger, Charles M. Waterman, James H. Caldwell, S. F. Slater, Charles Pride, George W. Christy, J. M. Reed, Richard Swain, H. M. Summers, Thomas Murray, Johnson Armstrong, of Louisiana; William McWillie, F. Zollcoffer, E. D. Brower, E. H. Saunders, R. D. Brown, and C. S. Tarpley, of Mississippi.

The ticket thus elected are in favor of extending the road towards the north.

RAILROAD EXPERIENCE; MASSACHUSETTS RESULTS.

There is nothing in which experience is more valuable, or can give us much teachings in railroad management, than the actual results of railroad traffic. Unfortunately so little regard is paid to recording details, and observing the laws of economy, that but few roads have furnished their experience, in a practical form. The best statistics, we have, of railroad experience is in Massachusetts, where annual reports are made of all roads and branches. We find in the American *Railway Times* a full report of all particulars in regard to the roads of that State, from which we compile the following results:

1. GENERAL RESULTS.

There have been eight years of connective reports and results in Massachusetts, from 1849 to 1857, inclusive. The results are remarkably uniform, and we give those of the first and last year, as showing all the changes which have occurred.

	1849.	1857.
No. of Roads.....	31	48
Miles of Road.....	1,130	1,567
Gross Cost.....	\$61,821,126	\$62,162,678
Average per mile.....	45,600	45,478
Gross Receipts.....	5,162,014	9,749,918
Gross Expenses.....	3,100,694	5,785,144
Net Income.....	3,061,320	3,964,774
Net per cent.....	6.09	6.10
Receipts per mile.....	\$1 41	\$1 92
Expenses per mile.....	0 71	1 10
Income per mile.....	0 70	0 82
No. of Passengers Carried.....	8,788,589	11,950,189
Tons of Freight Carried.....	2,167,754	3,231,672

This table affords room for some deductions of interest. The increase of gross receipts is 56 per cent. The increase of gross expenses is 90 per cent!

The results of this is, that while the increase of gross receipts is very large, the net per cent. of income remains just the same. It seems to us, however, that this is just contrary to what it should be. As the gross receipts increase, the net income ought to increase in a still larger ratio; for, as the road is older, and its agents and officers have more experience, the economy and organization of the machinery should be better. In roads as old and as well systematized as those of Massachusetts, the most perfect economy should be used.

It appears, also, that the total expenses are 58 per cent. of the whole receipts. In 1849, they were but 50 per cent. This is a confirmation of the same obvious fact, that the economy of the road is for some reason less. At least, such is the obvious bearing of the figures.

Another general fact of interest is the relation of the roads and their business to the surface and population of the State. These relations may be thus expressed:

Surface.....	7,800 sq. miles.
Population.....	1,100,000
Miles of road.....	1,567
One Mile of Road to.....	6 miles of surface.
One Mile of Road to.....	.800 people.

Comparing this with the railroads of Ohio, we find that in proportion to surface, the roads of Massachusetts are to those of Ohio,

as 14 to 6; and in proportion to population, just about the same.

The deduction from these facts is just what we should infer naturally would be the case, viz., that the capacity of a State or country to sustain railroads, is in proportion to its people and not its surface. It is the people who furnish the freight as well as the passengers; and, hence, it may be stated as a general truth, that if one million of people would afford sufficient income to a given number of miles of railroads, two millions will support double as many. Nor do we see any definite limit to this principle.

Another general deduction from these facts is, that at the ratio of 800 persons to a mile of railroad, the roads will pay over six per cent. per annum, and be perfectly secure. Although this is not a speculative interest, yet it may be regarded as enough for safe stocks. The distribution of net income is, of course, by no means even. One short road pays 13 per cent.; three pay 8 per cent.; six pay 7 per cent., and three pay six. The residue pay smaller rates, and several only two or three per cent. These differences will always occur, according to the more or less favorable localities, and good or bad management.

2. DETAILS OF BUSINESS.

One of the most important details, in regard to railroad business, is the sources of business. Dividing these into two general classes, we have this result:

From Passengers.....	\$4,424,347
From Freight.....	4,732,626

The ratio of passengers to freight is, as 51 to 49; but in the receipts from freight we have included those from mails and expresses. As between passengers and merchandize the receipts are considerably larger from the former. But this fact is wholly due to the great preponderance of passengers, on those roads which connect the numerous large towns, such as the Boston and Lowell, and the Boston and Portland Roads. On the roads leading from the west, such as the Western and the Fitchburg Roads, the case is reversed.

Another detail of importance is the comparative expense of keeping up the track, and that of motive power. On this head we find the following charges:

Road bed.....	\$1,391,543
Motive Power.....	829,086

It seems, then, that the maintenance of the track exceeds the cost of power about 70 per cent. This fact is rather a curious one; for, the general complaint has been of the breaking and renewing of machinery, whereas, it appears, that this is far less than the destruction of the rails. We say the rails, for when a road is properly ballasted, and the bridges properly made, the great wear and tear of the track must unquestionably occur directly or indirectly from the rails. If this be true, or if it be only partially true, then

it follows, as a principle, that the *heavier and stronger the rails are at first, the greater the economy of running the road.* This is an important principle. Suppose, for example, the Massachusetts roads had paid \$20 a ton more for very heavy iron, it would have cost about \$2,500,000 more, and would have saved in all probability \$500,000 in expense. It is plain that this would have been a very profitable arrangement. We imagine, that in the course of time, the ultimate cost of our roads will be made much greater; but, that the profits will be greater still. But, it is quite obvious, this will never be the case when the road is not previously and absolutely a good one.

(Correspondence of Railroad Record.)

THE INTRODUCTION OF CAMELS INTO THE UNITED STATES.

Camels well adapted to Texas—A portion will be well adapted to Arizona—Similarity of the Climate of Arizona, Chihuahua, Sonora and Durango to that of Arabia and Southern Persia—Specification of what might be done with camels in Arizona.

Major Wayne and Lieut. D. D. Porter made two expeditions for the purchase of camels; both eminently successful. The results generally in relation to the camels are stated with much accuracy and clearness in Harper's Magazine for October, 1857, in an article I have already mentioned, entitled "The Ship of the Desert." I quote it as follows, p. 578:

"After a sufficient interval allowed for recruiting, a series of experiments was instituted by the sagacious and zealous conductors of the expedition; which, so far as they have gone, abundantly prove the adaptability of the camel to military and 'express' purposes in the waste and scantily watered regions of the south-west; that they can be transported on long voyages with safety; that the atmospheric changes of Texas are even less unfavorable to them than those to which they are often exposed at home; that they find in Texas abundant subsistence; that they can be reared and trained there as easily and as well as in Arabia or Egypt; that they can bear even greater burdens in Texas, because better fed and more intelligently tended; and finally, that a knowledge of their management is not more difficult to Americans than to Orientals."

In a letter written to the Secretary of War more than ten months ago,* Major Wayne well observed: "The prejudices, fears, and objections of all classes are to be met only by successful demonstration." And he proceeds to relate an instance of the kind of demonstration which the camel is capable of giving, which occurred under his own direction, which excited as much the surprise and gratification of the spectators, as the performances of the wizard of the North, or any other magician in the minds of those who had never before witnessed them.

"At Indianola," says the Major, "and within the first month after the outlandish brutes were landed, some hay being needed at the camel yard one day, a man was sent to the quarter-master's forage house, with a camel, to bring up four bales, when the submissive brute was made to kneel, and two bales, weighing together 613 pounds, were packed upon him, doubts were expressed by several by-standers as to the camel's ability to rise under them. When two bales more were added, making the gross weight of the load 1,256 pounds, the gaping crowd gave noisy expression to their astonishment and indignation, and gentlemen who had never been to camel-land were willing to bet considerable that the critter couldn't get up under the heft of that. But when the camel arose, without a strain, and quietly walked away with his four bales, as one who felt himself master of the situation, there was a sudden change of public sentiment, most flattering to the outlandish brute and encouraging to his military sponsors. A Texan poet chronicled the event in verse, and a 'Node,' in honor of the occasion, was given to the world in the columns of the *Indianola Bulletin.*" †

The subsequent experiments of Lieut. Beale with a part of the animals brought over by Major Wayne and Lieut. Porter, have still further developed their capacities of endurance, and their adaptation to the climate of New Mexico from the 35th parallel south, and to all of southern California.

In addition to his own judicious experiments and observations on the camels, to be found in Senate Doc., No. 62, 34th Cong., 3d Session, Major Wayne has translated from the French, Col. F. Colombari's Treatise, entitled "The Zembourek, or the Dromedary Field Artillery of the Persian Army," who, as an officer of rank in the Persian army, had enjoyed great opportunities for knowing all about the qualities and capabilities of the camel. This is part of the Senate document just mentioned. The following extracts from it are pertinent to the objects of this article. There are the camel with two humps; and the dromedary with one hump. Col. Colombari, speaking of those in Persia, says:

"The dromedary is of two kinds; one strong and massive in form, which inhabits the north in the provinces of Azerbaijan, Irak Ajemi, Asteradad, and Khorasan; the other weaker, but more active, found in the southern provinces of Khuisistan, Farsistan, Kirman, Yezd, Laristan, etc. * * * * *

"The dromedary is not found wild. It lives for thirty years, but rarely attains that age, being either sacrificed in honor of some great personage, or sold to the shambles. Their docility is proverbial to such a degree,

that the Oriental fabulists say that the dromedary would be led by a mouse. Bad treatment makes them stupid; but they are sensible to kindness. Before they are five years old, they are trained to carry the pack-saddle. When too heavily loaded, they utter plaintive cries, and even shed tears, and it is only by blows and by pushing them up from behind that they can be induced to rise. Arrived at the end of the stage, they are unloaded, with the exception of the pack-saddle, which is left on to prevent the animal from becoming chilled, the nights in Persia being cool even in summer. Throughout the year, they sleep in the open air, care only being taken to shelter them from the wind, by placing them behind a wall, in the court-yard of a caravanserai, or in some low spot covered with large pieces of carpet and matting, and thus protected, they sleep even upon the snow.

"When rutting they are vicious, and some times ferocious. They are then removed from their companions, and the lower jaw and knee are tied together. * * * Luckily, the rutting season is not the same for all in a herd of dromedaries; not more than two or three in twenty are in this condition at the same time, which allows of all necessary precautions being taken to avoid accidents.

"The dromedary travels over ground of every description; they are very sure footed, even when ascending slopes they choose their steps with admirable instinct, and often when the ascent is very steep, walk upon the callosities of the forelegs, trying thus to reach the summit by maintaining a horizontal position. Going down hill fatigues them, particularly in stony soils, and the rider has often, in such cases, to dismount; but in sandy soils they have a great superiority over all other animals.

"They kneel down and get up easily, but this movement should not be repeated too often, especially after a long journey, and if they are loaded, for they will finally refuse to move and will not stir until they are rested. In the north of Persia the young dromedaries are weaned when a year old, which is the cause of their being stronger than those of the south, where the milk is used by man. As soon as weaned, they are turned into the fields to feed. They seem to prefer the thistle and wormwood (*teszanlin*), and find subsistence where the eye of man can only detect an arid soil. They resist hunger, and especially thirst for several days. In winter they rarely drink; the snow which they eat sufficing them. When they have to work, they must be fed either with bran or barley, and straw. They are fed in the evening, and a single feed lasts them for twenty-four hours. An hour after feeding they begin to ruminate, to finish only the next day at the same hour. They eat ordinarily about six pounds of barley, and about nine pounds of straw a day.

* See Harper, October, 1857, p. 578.

† See Senate Doc., No. 62, 34th Congress, 3d Session, page 198.

Most dromedaries can make forced marches of fifteen *farsangs* per day, (fifty-four to sixty miles.)

"General Carbuccia says: 'According to what we have often observed, the large dromedary carries five to six sacks of barley, (about 132 pounds each); the medium sized, four sacks, and the smallest sized, three sacks, without counting the weight of the driver, who mounts upon his beast whenever he is tired.' The ordinary load in Persia is about 720 French livres, (about 770 pounds avoirdupois), and it is at this rate that they are hired, and that the packages for transportation in caravans are made up."

Arabia and Southern Persia, where these animals are very much used, are countries remarkably similar to Arizona. The distances between water are generally one-half more in the former countries than in Arizona. How useful might these animals, if introduced, prove in the transportation of provisions to the mines, and of the ores from the mines to the smelting furnace. Their keeping will not require more than that of a mule, while, according to size and quality, they will perform from twice to quadruple the service. There can not be any reasonable doubt of the abundance and richness of the silver ore of Arizona, nor that there are moderate portions of it sufficiently well watered and extremely suitable for grazing. Such a country presents precisely the field in which the camel can be most beneficially employed. It could there be easily acclimated, and as the ores promise to endure for ages, the advantages of introducing the camel in such a country would be of long continuance, even if considered only in connection with the products of the mines. As a means of transporting merchandize, they would, until a railroad is built across the country, prove very valuable.

In another number, I shall endeavor to show the importance of the increased production of silver to the commercial world.

W. A.

SOUTHERN MINNESOTA RAILROAD.

This road is one of those that are to receive State aid from the recent appropriation of \$5,000,000 by Minnesota. One division of the road starts from La Crescent, opposite La Crosse, and runs north-west to Rochester, where it connects with the Transit road running west. Another division runs from St. Anthony by way of St. Paul in a south-westerly direction, to the State line of Iowa, near the mouth of the Sioux river.

The following are the officers of this Company:

Dan. Wells, Jr., *President*; C. W. Thompson, *Vice President*; Selah Chamberlain, *Treasurer*; E. P. Whaling, *Secretary*; Moses Kneeland, *General Agent and Acting Director*; H. L. Palmer, *Attorney and Land Commissioner*; D. J. Whittemore, *Chief Eng.*

Railroads.

ILLINOIS CENTRAL RAILROAD.

The Annual Report of this Company made to the stockholders March 17, 1858, is received. We shall make such extracts as will show the condition of the Company. Much of the detail of the report, although interesting to the stockholders, will be of no material service to our readers, and is, therefore, omitted. Such details are, however, highly important, and should always be given in the reports of a company. They enable the stockholder to judge of the fidelity and ability of his representatives, and to cast his vote for the next year's management much more understandingly. The Report of the Directors says:

The Directors submit herewith the reports and statements of the officers of the Company in charge of the several departments of its business, to which the careful examination of the shareholders is invited, as affording sufficient data to enable each proprietor to form his own judgment as to the value of his investment, and the details of its administration.

The extraordinary occurrences of the year just closed, make it proper for the Directors to recall your attention to the facts stated in the last Annual Report. The Floating Debt was there shown to be \$2,774,917 60, and it was stated that the growing business of the road would require large additional outlays for equipment. Contracts were made accordingly, and liabilities incurred. And the mode of making these liabilities was clearly indicated in the following passage of the Report:

"FINANCES.—To meet the expenditures of Construction Account during the present year and to liquidate the Floating Debt, it is proposed to enlarge the present Stock from 170,000 shares to 255,000 shares; this will represent the actual cost of the road, and should be distributed to the present shareholders, so that each may receive his share of the new issue, in just proportion to his present interests."

The new issue of stock was made in July last, and \$30 per share paid on one-third of the amount, and in order to make the payment less onerous to the shareholders, the balance was issued in the shape of Optional Rights maturing in February and July, 1858. No doubt was felt or expressed in any quarter that these Options, as well as those previously issued, and maturing in January, 1858, would be availed of. If such had proved to be the case, the indebtedness of the Company would have been discharged just as effectually as it will now be by the proceed of the Optional Right Bonds which the Company are issuing upon the basis of these very Options.

The financial crisis, however, which occurred soon after this issue of stock was made, deranged the business of the whole country, rendering it impossible for the Directors to carry the Floating Debt until the Options should mature; and finally, reducing the market value of the stock below par, so that the entering of the Optional Rights could no longer be relied upon to replenish the exhausted treasury of the Company. It is plain, therefore, that a suspension of payment was the inevitable consequence of this state of things, and an assignment of the property of the Company the only judicious course for the Directors to take.

This simple statement is submitted as the justification for the large Floating Debt with which the Company were unfortunately embarrassed at a time when credit and confidence were shaken to their foundations. This debt came into existence in order to complete and equip the road. It was candidly made known to the shareholders, and the mode of its liquidation approved at their last general meeting. This mode proved ineffectual only in consequence of financial derangements which have affected the whole civilized world; and at this time under the new loan the very shares created for the liquidation of the debt, are made the basis of the loan, which will discharge the indebtedness necessarily incurred, and as was supposed at the time fully provided for.

The new loan will soon relieve the Company from its embarrassments, so mortifying, and yet not without countervailing advantages. The sad experience of a large floating debt will not soon be forgotten. The mortification of a suspension of payments will, it is hoped, leave an indelible impression on the minds of the managers of this great enterprise. Its value and its merits are now as great as ever they were; for except in feeling, the suspension and assignment have not been attended with any serious sacrifices. Since the closing of the annual accounts, the reports from the road and the land office are more encouraging, and there is every reason to anticipate a healthy revival of business in both departments during the coming year.

It is well known to the shareholders that the closing months of the year, when the crops are carried to market, are, and must for some months be relied upon as the main period of profit. During these months in the year just closed, all business was prostrated, and the falling off in receipts on all Western Railroads immense. Under these circumstances it is not discouraging that the profits of the year have not reached the just expectations of the Directors.

The resolutions and suggestions of the meeting of shareholders held in London, February 11, 1858, will undoubtedly receive the early and careful attention of the Board of Directors, but at this juncture it is not deem-

ed expedient to recommend any definite financial policy, other than carefully to avoid, so far as the exigencies of the enterprise will admit, the existence of a floating debt, which experience has shown to be unsafe, even when the prospects are most encouraging."

The report of the Vice President says :

"In 1856 the part of our Main Line north of Centralia, was without a direct connection with Chicago, under our own control. In March, 1857, arrangements were entered into with the Peoria & Oquawka Railroad Company to enable them to complete their road between our Main Line and Branch; the conditions have been fulfilled and the road completed. Its position is central and convenient, crossing the Main Line 154 miles north of Centralia and 189 miles south of Dunleith; intersecting the Branch 81 miles south of Chicago and 171 miles north of Centralia.

The contract provides for the passage of all our freight trains on the following terms, viz : This Company guarantees the payment of \$50,000 per annum, and if 50 per cent. of our traffic over the part of the Peoria and Oquawka between our Main Line and Branch exceeds that amount, we are to pay that percentage of the earnings until it reaches \$75,000 per annum, which is the maximum compensation under any circumstances. This contract is to remain in force until the payment of the \$500,000 of 1st Mortgage Bonds purchased by this Company.

The compensation above referred to is paid into the hands of Trustees, and by them devoted to the payment of the interest on the 500 bonds, two per cent. of the surplus going to the formation of a Sinking Fund for the extinction of the bonds. The Peoria and Oquawka Railroad Company are to keep the road in repair, provide water, etc.

This is the only contract of this nature made since the date of the last report, and its terms were based upon the actual operations of 1856. An examination of the freight traffic passing between points upon the Main Line and Chicago, exhibits earnings which exceed the minimum compensation. The very great convenience to this Company by this communication, which for all practical purposes is entirely within its control, can hardly be duly estimated. The advantages will annually be increased by the development of the business of the lines, without increased expense.

During the past year the management of the Engineer Department has been in my hands. In submitting the results of expenditures in that department, it must be stated that most of the outlays were rendered indispensable by the condition of the road, while the rest were incurred in view of anticipations based upon the large business of the fall of 1856.

The beneficial effect of the work done is

already felt in the increased security and certainty, as well as the diminished expense of operating the road. Even in view of the monetary difficulties of the last few months, I see no cause to believe that any portion of these expenditures at all worthy of consideration, could judiciously have been postponed.

An important change was made in the organization of the road on the 1st of April last, by which all construction and repairs, except of rolling equipment, were erected into a separate department under the Chief Engineer. In this department the whole road was separated into four divisions, each under the charge of a resident division engineer, who is at the same time road master; the first extending from Cairo to Wapella, 230½ miles; the second from Wapella to Dunleith, 225 miles; the third from the Junction of the Main Line with the Chicago branch to Kankakee, 194 miles; and the fourth from Kankakee to Chicago, 56 miles. The divisions are again separated into subdivisions varying from 40 to 50 miles in length, each under the charge of a supervisor, and the subdivisions into sections of from 3 to 6 miles, each with its section foreman and gang of laborers. This system has been found to answer all expectations and intentions. The laboring force now employed upon the road, including the section foremen, is about one man per mile.

In some particulars the condition of the road itself was worse at the commencement of last year, than at any time since it was opened. At and near Chicago the protective works along the lake shore had been much shattered by severe storms, and in some places totally destroyed; while the gradual inroads of the lake, south of the city, had reached such a point that further protection was absolutely necessary. The heavy work in the neighborhood of La Salle was much of it unsafe; one high embankment was partly washed away, and the arch culvert under it broken in early in the year,—and several other serious slides occurred. The cuttings and embankments generally, over the whole road, were in very bad condition from want of proper width, sloping and ditching, and it was necessary to ballast a number of the worst cuts. Very many of the temporary structures (some of which have been standing over five years) were in a state which did not permit their renewal to be delayed.

It will be noticed that most of the very large amount of work, thus forced upon us, was rendered necessary by the hasty completion of the road to fulfil the requirements of the charter, and its actually unfinished condition when opened. A careful distinction has therefore been made between the ordinary repairs of the road arising from its operation, and work due to the above mentioned causes,

the latter being justly chargeable to construction account."

The report of the Master of Transportation says :

"I herewith submit a report of the operations of the transportation department of the road for the year 1857. The gross earnings were \$2,357,203 06; the operation expenses have been 76 per cent., showing a net surplus of \$565,971 92.

The increase in the operation expenses over the previous year, has been chiefly produced by the following causes :—the opening of eighty additional miles of road through a new country; the number of new stations and additional trains; the heavy expenses of maintenance of road and rolling stock, arising from the snow and effect of the weather in the spring of 1857, and finally, the unexpected decrease in business, arising from monetary derangement. A very material reduction may be looked for in the operating expenses of the road in 1858, unless unlooked for circumstances intervene.

Our earnings up to July show a small increase as compared with the corresponding period of 1856, but during the last half of the year there has been a monthly decrease in comparison with the previous year. The causes are too well known to require any extended explanation. The low price of grain, and the depressed condition of money affairs, have caused a general stagnation in the movements of produce, now so abundant in the West, and have largely curtailed the amount of merchandise usually brought from the East. It will be seen, however, that while the business from foreign lines has decreased, there is a steady increase of the local traffic originating from the lands lately sold by the Company. But few years can elapse before the lands along the line will afford a large local business, both in freight and passengers;—the true foundation of the success of any road.

The coal traffic has not been developed during the past year so largely as could have been desired; yet coal is being steadily introduced for domestic and manufacturing purposes, and we have provided a large equipment in engines and cars to accommodate this business, which must yield us a handsome revenue in a few years."

The General Balance sheet of the Company and the details of its business have been as follows :

Permanent Expenditures	\$23,437,669 52
Working stock of supplies, etc.	605,405 25
Interest account.....	\$3,521,055 51
Less avails of Int. Fund.....	692,002 92
	<u>2,829,052 59</u>
	<u>\$26,872,127 16</u>
Capital Stock.....	\$ 6,556,435 00
Construction Bonds.....	\$16,804,000 00
Free Land Bonds.....	3,000,000 00
Optional Right Scrip.....	783,500 00
Net Floating Liabilities.....	2,307,042 24
	<u>\$26,872,127 16</u>

VICKSBURG AND SHREVEPORT R. R.

The following is an extract from a letter of N. D. Coleman, Esq., President of this road as published in the Vicksburg Southern.

If our Vicksburg and Shreveport road were this day finished fifty miles into Louisiana, it would bring to the river from thirty to fifty thousand bales of cotton a year, and to Vicksburg from thirty to fifty customers daily. These customers are a good class of purchasers, and if our merchants can afford to sell at New Orleans prices, they will buy all their upper country supplies here, as well as their dry goods; they will also purchase here many articles, such as sugar, coffee, &c., if they can be sold at New Orleans prices with freight added. It is not and ought not to be expected that we can gain or retain customers if our charges are higher than cost and freight from New Orleans. Let the planters once see that they can purchase here on as good terms as elsewhere, and we shall have a heavy trade from the parishes of Louisiana.

The cars are now running on that road to Richmond, twenty miles on Monday, Wednesday and Saturday of each week, giving to the country people about 4 hours to remain in the city. Let the merchants answer whether those days are not the best business days of the week. From twenty to sixty passengers now occupy the cars regularly, and the return freights are respectable. The next 20 miles would more than double the business, because the road would then have reached the Macon hills, (a plateau of rich lands, 30 feet above overflow,) at a point accessible to the people of all Franklin and a part of Carroll parishes. From that station we believe the cars would bring in thirty-thousand bales of cotton a year, and fifty passengers daily. All of these passengers would trade more or less in this city. It is most probable that the smaller planters would sell their cotton here, and purchase all their supplies of every kind.

The next twenty miles would reach the Bayou River, and bring to this city the business of nearly the whole parish of Morehouse, and the eastern portion of Ouachita, if not the whole of that parish east of Ouachita River, including Monroe. This would assuredly be the case until that river becomes fit for navigation, which rarely occurs until after the 1st of January. If the Ouachita were navigable, and the railroad finished to that point, I believe that Vicksburg would do more of the trade of that parish than the city of New Orleans.

Perhaps I have had more intercourse with the people of those parishes, than any other person who has a direct interest in Vicksburg, and understand better their feelings and desires on the subject. They are extremely anxious for a connection, with the view of transacting their business with Vicksburg. It is the true interest and policy of Vicksburg to reciprocate these feelings and desires, and I trust that the citizens will now exert all their energies and power to bring about the connection without further delay.

I may be asked by some, what I propose:

First—Let the city subscribe \$100,000 of stock in the Company, so that the iron may be secured to finish the track to Monroe as speedily as possible, and Vicksburg feel its weight in the management of the affairs of the Company.

Second—Let the city authorities secure and set apart to the Company a suitable location for a depot within its limits, so that the Company may at once take the necessary

steps to improve it and prepare for passing the river with the passengers and freight of the road.

It is impossible to indulge in a train of reflections in relation to the special enterprise under consideration, without associating the idea of its extension from each end—eastward through Alabama, and westward through Texas. The prospects in both these quarters are favorable, but the limits of a letter will not permit me to examine them at present.

In conclusion, allow me to express my strong desire and hopes that all the papers of this city may unite to make one more common effort to push forward to completion this grand enterprise.

Very truly yours,
N. D. COLEMAN.

MEMPHIS, EL PASO AND PACIFIC RAILROAD.

"Bowie County" a correspondent of the Lamar Enquirer, gives the following account of the condition and prospects of this great enterprise.

As the public are interested in knowing the prospects, progress, &c., of this enterprise, the following facts are presented which give a very flattering view of its condition, (reference is made to the amended acts now being published in the newspapers which will enable every person to put their own constructions and place their estimates thereon.) We think it will readily be seen that no corporate body or people were ever given such extraordinary aid to build and release themselves from oppressive rates of transit and transportation. We now sum up the requirements of the charter which we think is correct, as follows: To locate and grade fifty miles by March, 1861, to mark out and identify the center of the extension line to the waters of the Colorado River in fifteen months, and survey the land in the Reservation to the Brazos River in two years, then are the conditions to this and the charter with its franchise is secured. Now let us examine the abilities of the company to do this, and if after an examination, the means seem to justify the effort then let our whole people back the effort by giving money, it don't now require much, and counsel and aid, and we predict our united effort will place this enterprise out of the woods. The following is believed to be a correct estimate of its prospective means. We invite close examination as to the correctness of the same, and reference is made to the charter and amended acts for data.

The stock-books are over \$700,000, but suppose we call them \$600,000 as reliable, then call for ten per cent three years up to March 1861, is in the aggregate \$180,000, there had been 12 per cent. calls made up to next June, and there is yet due the company on these calls say \$35,000; the State deeds to the company for grading four sections of land per mile, say 50 miles, is 200 sections at only one dollar per acre the States value for certificates \$128,000 making a total of \$343,000; the grading of 50 miles will by the Engineers estimate, cost \$86,600 but suppose it cost \$100,000, it leaves a balance of \$243,000 the location of the extension line or the remaining portion of it, and the sectioning of the reservation to the Brazos river can be done with less than five hundred dollars in cash, a small interest in the prospective rights to land will accomplish this. Again the State gives a locative right to four sections now for

grading to be patented with eight sections more when 25 miles are completed, and so on in sections of five miles thereafter.

These are the basis for capital independent of the State loan and the private landed basis, which from the progress now made will be a matter of easy accomplishment. We now invite the public to carefully examine for themselves. The prospects of this enterprise are of the very best; if ever a people were surrounded by such elements of liberality such gifts of care and kindness confidence by the authorities of any government, we are at a loss to know where to find the record. Let us then be of good cheer; let all of us do our duty, and the people of Northern Texas will in a few years reap a rich reward, pecuniarily, and be relieved from the oppression of costly transit and the fees of onerous transportation.

Now let us take the worst view that can possibly be taken and will suppose the abject condition of failure, we shall have 25 miles graded, and but little is required to complete this. If this company does this and stops, and never touch the work again, we will have 200 sections of land which will pay for grading the 50 miles, pay for all the surveying, locating and mapping, which has been done and have a handsome sum to be divided between those who have paid their calls.

GRAND TRUNK RAILWAY.

The bill brought in by Mr. Galt "to amend" the Acts of the Grand Trunk Company, has been printed. It empowers the Company to alter the terms and conditions of the lease with the Atlantic and St. Lawrence Company, as far as may be thought advisable, so long as the interests of the Province are not prejudiced.

The existing capital of the Company, in stock and shares, is declared to consist of £2,707,100 sterling, consolidated stock, 19,988 shares of £25 each, known as B shares, on which £12 10s. per share has been paid—37,752 unissued B shares of £25 each, and 2,750 shares of £25 each which have been forfeited. The authorised loan capital of the Company, exclusive of the bonds issued by the Provincial Government, is declared to consist of debentures of the Company to the amount of £1,811,600, called A debentures and B debentures,—£2,000,000 secured by bonds bearing seven per cent. interest;—£102,740 secured by debentures of the city of Montreal;—£90,000 secured on debentures of the Atlantic and St. Lawrence Company in favor of the St. Lawrence and Atlantic Company,—£20,648 loaned on bond by the British American Land Company—£20,548 loaned on bond by the Seminary of St. Sulpice,—£100,000 secured on debentures of the Quebec and Richmond Company, now amalgamated with the Grand Trunk Company, and in addition, all such sums of money as have been or shall be raised by the issue of preferential or other bonds under the provisions of the 19th and 20th Vic., chap. III, or of this bill.

The Company seek, however, to increase their capital by a resolution of the Directors, sanctioned by two-thirds at least of the votes of the shareholders at a general meeting, and to pay interest on the share capital until the works are completed. The earnings of the Company, after deducting working expenses, are in each half-year to be appropriated as follows: First, towards the payment of the interest upon the amount which for the time

being shall have been raised by the issue of preferential bonds herein mentioned; secondly, towards the payment of the interest upon the loan capital for the time being raised in subsisting in respect of the several classes of bonds and debentures before mentioned other than the preferential bonds; and thirdly, towards the payment of a dividend at the rate of six per cent. on the stock and shares, and after payment of such dividend, then, towards the payment of the interest on the Provincial debentures, and after payment of such interest, the surplus, if any, to be applied in payment of a further dividend upon the shares of the said Company.

So much of the several acts of the Company as have reference to the privilege of voting conferred by stock or shares, is altered so far as to declare that the proportion of votes to the stock or shares shall be one vote for every £25 sterling of stock or of shares not yet converted into stock, provided the stock shall have been *bona fide* held for a period of at least three months prior to any meeting of shareholders. Power is sought to alter the number of directors—the number in no case to be more than fifteen nor less than six; to lease, etc., any portion of their work, with the consent of the Governor in Council, or with such consent to become lessees of other railways; and to enter into agreements with other companies for certain purposes.—*Colonist*.

ACCIDENTS ON ENGLISH RAILROADS.

The Board of Trade Report by Captain Galton on railway accidents for the year 1857 has just been issued, and from it we learn that in the year 25 passengers were killed, and 631 injured, "from causes beyond their own control."

These are all the real railway accidents in the year. There were others, such as from suicide, trespassing, &c., but they can not properly be placed against the account of railways.

The 25 fatal railway accidents in 1857 occurred mostly on English railways. Of the 25, as many as 24 occurred in England, and of these 25 exactly half—12—were killed in one accident, namely, the Lewisham accident on the South Eastern railway. One passenger was killed on Scotch railways. "In Ireland, (reports Captain Galton) there were no passengers killed or injured from causes beyond their own control." On most of our railways in England no fatal accidents have occurred.

The South Eastern have had to pay a pretty penny for the Lewisham accident, for Captain Galton informs us that "the compensation alone in the case of the Lewisham accident on the South Eastern railway amounted to £25,000." £25,000 in compensation for one accident!

The figures following will show how infinitesimally small is the number of fatal accidents to passengers in relation to the number of passengers carried:

Year.	No. of miles railway open.	No of passengers conveyed.	No. of passengers killed.	Proportion of killed to carried.
1850.....	6,326	72,454,422	12.....	1 in 6,071,262
1851.....	6,755	85,391,095	19.....	1 in 4,494,268
1852.....	7,113	89,135,729	10.....	1 in 8,913,572
1853.....	7,488	102,286,669	36.....	1 in 2,841,296
1854.....	7,842	114,356,884	12.....	1 in 9,529,907
1855.....	8,175	118,595,134	10.....	1 in 11,859,513
1856.....	8,490	129,347,592	8.....	1 in 16,168,449
1857.....	8,900	(returns not complete.)	25.....	(can not be calculated.)

The proportion of passengers killed to passengers carried will probably be found to be,

when the calculation can be made, about one in 5,200,000 in last year; one passenger killed for every 5,200,000 carried.

Bad, therefore, as 1857 has been for accidents, it is better than 1851 and 1853. We have seen how it is that the number killed is so high as 25 persons. We might say that one casualty caused the excess.

Nearly all the accidents occurred "from accidents which happened to trains."

The suggestion of Captain Galton contained in the paragraph we now quote, is worthy of consideration—

"Having regard to all the circumstances of this intricate question, it appears that the only practicable mode of obtaining a diminution of railway accidents would be to endeavor, by means of a more satisfactory investigation into the causes of the accidents, to obtain a more sure and just action of the law by which compensation is awarded. This would, probably, be best effected by causing a public inquiry to be made into the circumstances connected with every accident attended with injury to passengers or loss of life, and by an immediate publication of the report, showing the causes of the accident. The necessary tribunal might be constituted in a similar manner to those which inquire into accidents to ships under the Merchant Shipping Act, viz.: by two justices or a stipendiary magistrate, and an inspecting officer of this department as assessor.

"The clear knowledge of the causes of accidents would save much useless litigation by claimants for compensation; and the Shareholders and the public would obtain an impartial account of the circumstances which led to the accidents, immediately after their occurrence, which would tend materially to diminish mismanagement."—*Herapath's Railway Journal*.

CINCINNATI AND FORT WAYNE R. R. CO.

This company is about to resume work on its line, between Richmond and Newport. Several sections on that portion of the route which were well advanced towards completion when the work was suspended, can be finished up with local subscriptions which it is believed can now be obtained for that purpose. The directors have also some encouragement for an effort to prepare the track for the iron, the whole distance between Richmond and Winchester, and have it completed at an early day. The friends of this road at Bluffton, are also anxious, that an effort be made to complete the grading from that place to Fort Wayne, and are willing to engage earnestly in the work. Many of them believe, that if the proper steps were taken, a subscription from the citizens of Wells County could be obtained that would go far towards accomplishing the object in view; but they want some assistance from other portions of the line, and should have it. We wish we could assure them that Fort Wayne would respond to the call, and render that aid which has so long been withheld, and which has brought upon this community the reproach that we care nothing for this enterprise. The distance by this route to Cincinnati, is only 149 miles; while it is 242 by Peru and Richmond, 240 by Forest and Dayton, and 192 by Lima and Dayton. This last is the nearest we shall ever have until our direct line is completed, via Bluffton and Winchester.—*Fl. Wayne weekly Republican*

NEW SOURCES OF POTASH.

It is very difficult to set bounds on science, or to say what discoveries may or may not be made, within any given time. The familiar article of Potash, that has, from olden times, been only obtainable in the large way from the ashes of vegetables, is now, it appears, to be extracted much more cheaply and in larger quantities from feldspar and other minerals.

This new process is the invention of a German chemist, Dr. Meyer, and consists essentially in decomposing the mineral by calcination with lime, and then treating it with water under a pressure of 7 to 8 atmospheres. With feldspar 14 to 19 equivs. of lime are used to one equiv. of feldspar, or to 100 parts of feldspar 139 to 188 parts of lime.

The lime is employed either as hydrate or in the form of chalk; it is intimately mixed with the feldspar to a plastic mass, which is made into round balls of three to four inches in diameter, slowly dried, and then exposed to a temperature between a bright red and a white heat. The temperature must be so high, that the mass, after burning, may contain neither carbonate of lime nor uncombined caustic lime. It should, therefore, exhibit a very inconsiderable elevation of temperature with water. It is usually caked together. Of course, for such a decomposition, a very intimate mixture of the feldspar and lime is requisite. The more lime employed, the shorter the time necessary. After burning, the mass is powdered and heated with water in a vessel capable of bearing a pressure of 8 atmospheres, in which the decomposition is completed in two to four hours. The solution above the powder (which is never firmly solidified, as the formation of steam probably prevents cohesion) is caustic to the touch, is free from hydrate of lime, and always contains all the soda, and potash to the amount of about 9 to 11 per cent. of the weight of the feldspar employed.

A second extraction of the powder freed from the solution of potash is of no great use; little potash, but plenty of lime is dissolved; the latter cannot be taken up by the solution in the first instance. It is of no great advantage to continue the extraction longer than 4 hours.

If the alkaline solution, after saturation with carbonic acid, be evaporated to dryness, a little alumina and silica separate first of all; the carbonate of soda then crystallizes, and at last carbonate of potash remains, which, when pure minerals are employed, is perfectly free from other acids.

As regards the mass remaining insoluble in water, the very intimate mixture of its constituents renders it peculiarly suitable for the preparation of a Portland cement, the composition of which varies within the same limits. These cements, however, sometimes contain more alumina. This want of alumina, if it be a defect at all, is easily supplied by the addition of a little clay, with which the residue need only be mixed. The author has found, however, that the powder taken out of the kettle, and again strongly calcined, sets very rapidly and firmly under water, so that the addition of clay is unnecessary.

As a matter of course, this mode of preparation will not be applied exclusively to pure feldspar, as other felspars or minerals containing potash, must also be adapted for this purpose. Thus, for example, there are many granites which contain about seven per cent. of potash, and from which the manufacture of

potash would appear to be remunerative. Of course, in this case, the chemical composition is to be taken into consideration, and the amount of lime added to be modified accordingly.

The value of the potash now manufactured in the old way in this country, is estimated at over \$2,000,000 yearly, more than \$600,000 worth of which is exported. As soon as the new process is generally adopted, this, quantity will be of course largely increased, and the profitable uses of the alkali greatly extended.—*Am. Min. Chronicle.*

FORT WAYNE, GRAND RAPIDS AND MACKINAW R.R. CO.

We understand that this company, which has received a large grant of lands from Congress, are progressing with their work satisfactorily. About 150 miles of the grading is under contract. The line between Wolcott's Mills and this place, was definitely located by the board of directors at their meeting on the 16th of April last. The question which has of late excited considerable interest to the parties concerned, as to whether the road should pass through Albion or Kendallville in Noble county in this State, has been settled by adopting a central route, avoiding by a few miles, both of the rival towns.

We understand the Company intend issuing bonds based upon their road bed, iron and machinery for the whole distance, and the major part of their lands, and will be ready to offer them for sale the present summer. This Company has in their lands, an abundant means for building their road, without encountering the many difficulties that have embarrassed other and similar projects. We hope their efforts to complete their road within a reasonable time, will be crowned with success.—*Ft. Wayne Weekly Republican.*

THE PUGET SOUND COUNTRY.

If we were asked for an opinion as to what portion of the territory of the United States will make the greatest relative progress in population, wealth, and the development of its industrial resources within the next ten years, we should not hesitate to reply, "the country about Puget Sound." The land is fertile, and is covered with dense and very valuable timber. The climate is regular, mild and healthy, bearing a great resemblance to that of San Francisco. There are numerous mines of coal; gold is found in many of the streams, and the whole country is open to commerce by a magnificent bay which extends two hundred miles inland, and abounds with excellent harbors, deep enough for the largest vessels afloat. This bay, named Admiralty Inlet at its mouth and Puget Sound in its southern portion, offers conveniences for internal trade unequalled probably by any other bay in the world. There is no bar at the mouth, and vessels can pass either way in all kinds of weather, while inside the depth of water in the channel is in no place less than fifty feet.

South of the sound there is a level tract of fertile land, over which a railroad might easily be made to the Columbia river, a distance of sixty miles; and the Washingtonians hope that if they can get the railroad they will get with it a large share of the trade of the valleys of the Columbia and Willamette—trade which now passes through the difficult and dangerous entrance of the Columbia, where the steamer Republic was not long ago

detained for eight days before she could get out.

The Puget Sound country had just made a start in the development of its resources in 1855 when the Indian war broke out, drove away the families, ruined many of the settlers, and put a stop to most of their improvements. The damage from the Indians is now effectually and finally removed, and Washington Territory will this year take a new start.

The Sound already has a considerable trade for its small population. There are, on its banks, sixteen saw mills, capable of turning out 100,000,000 feet of sawn lumber annually. Its straight and tall timber is valuable for spars, and cargoes of them are sent to New York, England and Australia. The farmers on the sound have sent 6 000 barrels of flour of last year's crop to San Francisco, and this year they will send far more. There are several flourishing towns in the Territory, of which the principal are Olympia and Steilacoom.—*Alta California.*

The earnings of the Galena and Chicago Union Railroad for the month of April 1857 and 1856, were:

	1857.	1856.	
Freight.....	\$100,137 99	\$84,493 26	Decrease \$15,642 73
Passengers.....	90,309 75	54,938 60	Decrease. 28,371 16
Mails.....	3,769 88	3,000 00	Decrease. 769 88
Total.....	\$134,217 62	\$139,433 86	Decrease. \$5,216 24

The earnings of the Norwich and Worcester R. R. for April are more favorable than was anticipated. The figures are:

April, 1857.....	\$26,281 05
April, 1856.....	24,337 13
Decrease.....	\$1,943 92

MONETARY AND COMMERCIAL.

Since the date of our last report, money matters have been more quiet than during the preceding week. The payments of the first and fourth being over, there is usually a breathing spell till pretty well on towards the middle of the month. The past week has been no exception to the general rule. Currency has been quite abundant, and the banks have generally met the wants of their customers at regular rates.

Eastern Exchange has been unusually for some weeks. It seems to be gradually settling down to $\frac{1}{2}$ buying and $\frac{1}{2}$ selling, with a prospect of still further reductions.

In stocks we have not much to report. There seems to be a general disinclination to operate, and consequent dullness in the market is the result.

Provisions, bacon, pork, and lard have declined materially during the week.

At the east we notice a continuance of the abundant supply of money hitherto noticed. The bank statement show an increase in all the points. Stocks are, however, dull, and speculation seems to be flagging.

We subjoin our usual quotations from Hewson and Holmes:

Since the date of our last circular we do not perceive any change in the tone of our stock market; sellers of securities are quite as scarce and independent as buyers; both seem well inclined to the policy of "masterly inactivity," meanwhile the earnings of nearly every permanent line show a regular and marked increase over the point of depression produced by the financial crisis.

This, with the great reduction in the operating expenses, will give larger profits on a smaller business, than was obtained on the larger business of last year.

Money is increasing in abundance, and loans on good paper are readily obtained at easier rates of interest.

Eastern Exchange is in abundant supply and rates are lower. We quote $\frac{3}{4}$ to $\frac{1}{2}$ prem. on New York, Philadelphia and Boston. Exchange on New Orleans is quiet with very little demand at $\frac{1}{2}$ prem. Gold $\frac{1}{4}$ to $\frac{1}{2}$ prem. and dull.

In the transactions of the past week, we note Little Miami 6 per cent Bonds at 78 and int.; Covington and Lexington, 2d mortgages at 55 and int. and the 3d mortgages of the same road at 35; Hamilton and Dayton, 2d mortgage, 7s at 72 $\frac{1}{2}$ and interest; Indianapolis and Cincinnati, 2d mortgages at 75. Certificates of Deposit in Ohio Life and Trust Co. at 35.

In stocks we have sales of Hamilton & Dayton shares at 40; Indianapolis & Cincinnati at same price; Little Miami at 75 and Columbus and Xenia at 74; Farmers Bank Ky. Stock at 115 $\frac{1}{2}$.

SALES AT THE NEW YORK STOCK BOARD—May 10.		
\$1,000 Ohio State 6's, '60.....	101 $\frac{1}{2}$	
500 Indiana State 2 $\frac{1}{2}$'s.....	56	
26,400 Tenn. State 6's, '90.....	90 $\frac{1}{2}$	
20,000 Virginia 6's.....	92 $\frac{1}{2}$	
500 do.....	93	
11,000 North Carolina State 6's.....	95	
26,000 Miss. 6's.....	84	
2,000 do.....	84 $\frac{1}{2}$	
60,000 do.....	84 $\frac{1}{2}$	
1,000 Cal. 7's.....	85	
1,000 N. Y. C. 6's.....	88 $\frac{1}{2}$	
1,000 Hud. 2d Mt. B.....	98	
4,000 Harlem 1st Mt. Bonds.....	82	
2,000 do.....	72 $\frac{1}{2}$	
7,500 Mich. S. F. B's.....	67	
13,000 La C. & Mil. Gl. B's.....	31 $\frac{1}{2}$	
5,000 Ill. C. B's.....	89 $\frac{1}{2}$	
1,500 N. Y. C. 7's.....	106 $\frac{1}{2}$	
5,000 Erie B'd's, 75.....	49	
1,000 Erie 2d Mort. bonds.....	93	
5,000 Terre Haute and Alton 2d mort. Bonds.....	48	
850 Shares New York Central.....	89 $\frac{1}{2}$	
160 " Erie R. R.....	24 $\frac{1}{2}$	
5 Shares Milwaukee & Miss.....	50 $\frac{1}{2}$	
10 " Hud. River R. R.....	30 $\frac{1}{2}$	
125 " Harlem R. R.....	11 $\frac{1}{2}$	
30 " Reading.....	45	
50 " Mich. Cent.....	64 $\frac{1}{2}$	
25 " Mich. S. & N. Ind.....	26	
100 " Mich. S. & N. Ind. pref.....	51 $\frac{1}{2}$	
40 " Panama.....	168	
5 " Cleve., Col. & Cin. R. R.....	92 $\frac{1}{2}$	
200 " Galena & Chicago.....	90	
100 " Cleveland & Toledo.....	44 $\frac{1}{2}$	
150 " Chicago & Rock Island.....	79 $\frac{1}{2}$	
12 " Pacific Mail St. Co.....	70 $\frac{1}{2}$	

CINCINNATI STOCK SALES.

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,

AND AT PRIVATE SALE

BY HEWSON AND HOMES,

May 12, 1858.

BONDS.

\$8,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	78 and int.
\$6,000 Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	36
\$5,000 Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	55
\$3,000 Cov. & Lex. R. R. Co. 10 per cent. Income Bonds.....	20
\$4,000 Cin., Ham. & Day. R. R. 7 per cent. 2d Mort. Bonds.....	72 $\frac{1}{2}$ "
\$5,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	75
\$2,000 Ohio & Miss. R. R. Co. 7 per cent. 2d Mort. Bonds.....	30
\$1,000 Col. & Xenia R. R. Co. 7 per cent. Div'd Bonds, due 1861 and '62.....	87 and 88
\$2,000 City of Newport, Ky., 10 per cent. Bonds.....	100
\$10,000 Ohio & Mississippi R. R. Co., Construction Bonds.....	25
\$1,300 Certificates of Deposit in Ohio Life Ins. & Trust Co.....	35

STOCKS

264 Shares Ohio & Miss. R. R.....	5
80 Shares Cin'tl., Hamilton & Dayton.....	40
71 " Indianapolis & Cincinnati.....	40
36 " Little Miami R. R.....	75
50 " Columbus & Xenia.....	74
12 " Farmer's Bank, Ky.....	115 $\frac{1}{2}$

COMMERCIAL LAW.—Circuit Court United States, the Hon. A. G. Magrath presiding—W. T. Lane & Co., agt Asa Gobbold.—This was an action against one or two makers of what purported to be a promissory note, whereby defendant promised to pay \$2,274.27 for value received, with current rates of exchange on New York and all expenses of collection, in case of suit at the agency of the Mechanics' Bank of Cheraw, S. C., at Marion, S. C. Defendant's counsel contended that this was no promissory note—that if an agreement, the consideration must be set out in the declaration, and all the facts established by proof; and so it was held by his Honor, that a paper writing containing a promise to do anything more than to pay a certain sum of money at a certain time, and at all events, is not a promissory note, but is a special agreement, and must be declared on as such.

RAILROAD MATTERS.—The Montgomery Mail, in urging the necessity of a Northern Railroad to connect Montgomery with the mineral regions above, says that the necessity of such connection is constantly becoming more palpable as the Pensacola companies progress with their undertaking. It is probable that, by next November, one-third of that line will be in running order; 45 miles from Greenville to Montgomery, and 10 or 15 miles northward from Pensacola. In addition to this, much the larger proportion of the whole grading will have been done and the companies will have become strong enough to negotiate for iron, and thus secure an early completion of the whole line.

There, then, we shall have a harbor on the gulf with 25 feet of water on its bar. And is it not the natural, proper outlet for the vast mineral deposits which make Shelly, Talladega, Cherokee, etc., the richest portion of Alabama.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport,—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even ing.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup'l. Racine, May 15, 1857.

G. W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

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CLEVELAND, OHIO,

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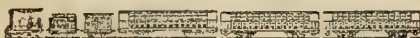
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Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

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VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.20 A. M.

CHICAGO EXPRESS.—Through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 3.00 P. M.

ACCOMMODATION.—The 3.00 P. M. Train arrives in Indianapolis at 8.30 P. M.

THIRD TRAIN, 5.50 P. M.

NIGHT EXPRESS.—The 5.50 P. M. Train arrives in Indianapolis at 1.30 A. M.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURG.

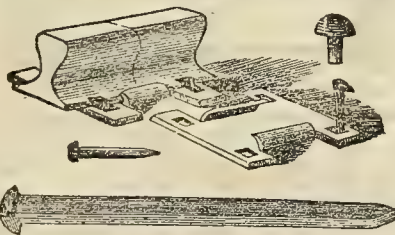
Through Tickets good until used, may be had at the Company's Ticket Office, under the Spencer House, corner Broadway & Front, where all necessary information can be had. J. E. GIBBONS, Ticket Agent.

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H. C. LORD, President.

W. H. L. NOBLE, Gen'l Ticket Agent.

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AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

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July 14, 1857.

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For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

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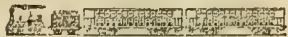
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LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

RICHARD NORRIS & SON.

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PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

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feb 4-11

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trestling B. M.; 2,500 yards Plane Masonry; 1,400 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging. 44 miles of Lion, 60 lbs. to the yard, with Chails, Spikes, &c., Depot, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Flece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860. WM. B. MUMFORD, President.

Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO.

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n 21 NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

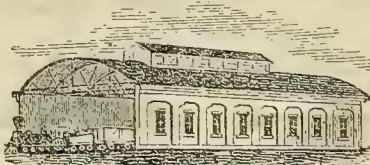
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 60 feet span, 8,160 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 80 feet span, 2630 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting. Office, No. 66 West Third street, Cincinnati, O. may 13.

MOSELEY & CO.

J. DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16-7

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

64 Broadway, N. Y.

Ncv

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C. april 2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. Jan 18, 1855-ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about

lbs. per yard, "Erie" pattern, of best

quality Welsh make, now ready for de-

livery, for sale by

Feb. 1858. VOSE, LIVINGSTON & CO.,

Mar. 23, 1f. 9 South William St., N. Y.

Most Direct Route to the East. BALTIMORE AND OHIO RAILROAD.

From Wheeling to Baltimore and Washington City, D. C.

MAKING DIRECT AND CERTAIN CONNECTIONS WITH PHILADELPHIA AND NEW YORK,

BY THE

Little Miami and Central Ohio Railroads.

The Baltimore and Ohio Railroad (with its uniting lines) now offers the fullest advantages to travelers between all parts of the West and the larger Eastern cities.

This is the

ONLY ROUTE

By which THROUGH TICKETS can be had to WASHINGTON CITY, BALTIMORE, PHILADELPHIA and NEW YORK, thus giving the Western merchant the range of the Baltimore, Philadelphia and New York markets—an advantage to be derived by no other route.

THREE DAILY TRAINS.

Passengers going East from Cincinnati take the cars of the Little Miami Railroad Express Train, at 6 A. M., 10 A. M., or 6 P. M., for Columbus, connecting there with the Central Ohio Railroad through Newark and Zanesville, for Bel Air, on the Ohio, four miles from Wheeling. From this place the connection with the Baltimore and Ohio Railroad is made direct. By the Express Train of this route, the time from Cincinnati to Baltimore is but 26 1/2 hours, and to Washington is but 27 1/2 hours.

Fare as Low as by any other Route.

FOR THROUGH TICKETS.

And all information, please apply at the offices No. 2 Burnet House, second door west of Vine street; No. 177, Gibson House Building, and old office, southeast corner of Broadway and Front street, opposite the Spencer House; or at the Eastern (Little Miami) Depot, East Front street.

P. W. STRADER,

General Agent.

Be sure to ask for tickets by the Wheeling route and Baltimore and Ohio Railroad.

Baggage checked through from Cincinnati to Baltimore.

FREIGHTS.—With the largest equipment of any railroad in the United States, the road is prepared to do an immense business in the transportation of freights, which are carried with care and dispatch, and at rates as low as those of any other first class line. For particular see freight tariff, copies of which may be seen at any of the forwarding houses in the West.

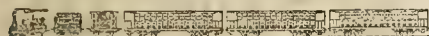
WM. E. WOODSIDES,

Master of Transportation, Baltimore.

JOHN M. SHARP, General Traveling Agent,

June 10 Office, Adams Express Co., Third street.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:30 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads. for the West and South, as above.

E. J. PECK,

Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street, Cincinnati, Ohio

LEE & LEAVITT.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH 1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

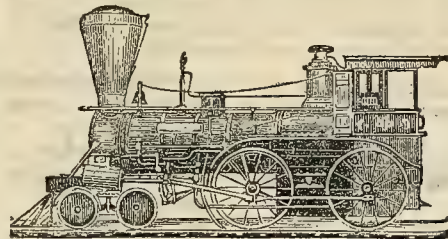
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3.30 P. M.

FOR INDIANAPOLIS—At 6 A. M. and 2.30 P. M.

FOR LAWRENCEBURG AND AURORA—At 5.45 P. M.

FREIGHT.—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5.30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5.45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,

Ag't Cin. and St. Louis Omni-bus L

Office No. 2 Burnet House.

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BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

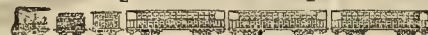
MIDDLETON, WALLACE & CO.,

Jan 8 ly 119 Walnut st., Odd Fellows' Building

1857. Summer Arrangement. 1857

Cincinnati, Hamilton & Dayton

[TRUNK LINE.]



RAILROAD,

FOR THE

NORTH, EAST, AND WEST.

[All Eastern Trains run into Lake Shore Depot at Cleveland.]

COMMENCING MONDAY, Aug. 24.

THROUGH TICKETS FOR

PITTSBURG, INDIANAPOLIS,
PHILADELPHIA, TERRE HAUTE,
CLEVELAND, ST. LOUIS,
DUNKIRK, LAFAYETTE,
BUFFALO, LOGANSPOUT,
NIAGARA FALLS, CHICAGO,
NEW YORK, BOSTON.

And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for **FIRST FAST EXPRESS TRAIN** on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS AND LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

"STEAMER BAY CITY."

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with **MORNING EXPRESS** Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

BAGGAGE CHECKED THROUGH.

RETURNING TRAINS

Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:15, 6:55 and 10:15 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

The Omnibuses will call for passengers by leaving their names at either of the Ticket Offices.

W. H. SMITH Agent.

WAREHOUSE
No. 5 FRONT STREET
 Opposite Public Landing,
 Cincinnati, O.

PORTER, ROFFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON"

We have now in operation, at Pomerooy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomerooy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
 ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
 WHEELS AND AXLES fitted for use.
 HYDRAULIC PRESSES for pressing Oils and for other purposes.
 MACHINERY of the most approved construction for Flouring and Saw Mills.
 CASHOLERS of any size, and Machinery and Castings of all kinds for Gas Works.
 STEAM BOILERS and WATER TANKS of any size or description.
 SHAFTING, PULLEYS and HANGERS.
 WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,
 —AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
 East Side, between Third and Fourth Streets,
 KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
 Printed to order in the best manner.
 Ruling done to order, of any Pattern.
 Blank Books of every description, with or without printed headings, got up on short notice.
ANDERSON, GATES & WRIGHT,
 (Successors to JACOB ERNST,) 112, Main Street, Cincinnati

J. T. CRAFTSEY,
ATTORNEY AT LAW,
 OFFICE:
N. W. Cor. Walnut & Sixth streets,
 my21 CINCINNATI

SCHENECTADY
Locomotive Works,
 SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,
 AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Aug 16. 1y



M^CDANIEL & HORNER,
LOCO-  **AND CAR**
MOTIVE **SPRING**

MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to
McDaniel & Horner.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.
 References.

NORRIS BROTHER'S, Locomotive Builders, Philad.
A. C. GRAY, Prest. New Castle Manuf. Co.
U. WELLS, R. R. Car Manuf. Petersburg, Va.
I. R. TRIMBLE, Supt. Philad. R.R. Co.
 May 19.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.
BUSH & LOBDELL,
Wilmington - - - - - Delaware.

MANUFACTURERS OF
CHILLED WHEELS
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TIRES.

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
 Execute Promptly Orders to any Ext nt
 FOR THEIR

CELEBRATED WHEELS,
 EITHER SINGLE OR DOUBLE PLATE.
 WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
 In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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 WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience is car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable rights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

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R. R. GUIDE AND ROUTE BOOK

ESTABLISHED in 1850; Always Reliable; Contains Official Time Tables with References; Combined Railroad Routes; Steam Navigation; Gazetteer. Price 55c., with Large Map - Cheap Edition Time Tables, 12c. DINSMORE'S THIRTY MILES AROUND N. YORK, By Railroad, Steamboat, Stage, Express and Telegraph; or how to get in and out of the Metropolis. An alphabetical list of 1000 places. Price 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated by Hoppin. Part First now ready, with spicy articles on Peter Funk Shops—Patent Safe Swindlers—Pick Pockets, both sexes—Garroters and Highwaymen—Gamblers and Gambling Houses. Price only 10 cents—All sent free by mail. DINSMORE & CO., decl0 9 Spruce street, New York

HOYT'S WATER GAUGE

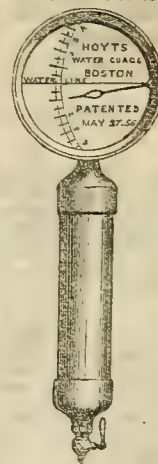
Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
 jy30 No. 66 Broadway, N. Y.

APPLEGATE & CO.,
Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
 43 Main St. Cincinnati, O.



Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, MAY 20, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING,

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription Three Dollars per annum, in advance.

ADVERTISEMENTS—

One square, single insertion	\$1 00
“ “ per month	3 00
“ “ six months	12 00
“ “ per annum	20 00
One column, single insertion	4 00
“ “ per month	10 00
“ “ six months	40 00
“ “ per annum	80 00
One page, single insertion	10 00
“ “ per month	25 00
“ “ six months	110 00
“ “ per annum	200 00

Cards not exceeding 4 lines, \$5 per annum.

Subscriptions and communications addressed to
WRIGHTSON & CO.,
Publishers and Proprietors,

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✂ We acknowledge the receipt of valuable maps, from the Department of the Interior; also, courtesies from Hon. W. S. Groesbeck.

✂ The receipts of the Southern Michigan Road for the first week in April, were \$35,204, against \$45,705 last year. The Board of Directors is in session.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,

43 Main St. Cincinnati, O.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,

THEODORE DEHON,
ar Broadway, New York.

no13 10 Wal

RAILROAD BRIBERY AND FRAUD.

One of the most singular, as well as astonishing developments of any kind made in this country is that of the Wisconsin frauds. At first sight they seem incredible. Almost a whole Legislature bribed, and the Governor bribed highest! It is almost impossible to imagine how any sane men could have so disregarded their own character and reputation. We are utterly at a loss to understand the motives of such conduct, on any of the ordinary principles of human conduct, except upon the obvious one, that the bribe was so high—that poor men, and unprincipled men could not resist it.

The case is this:

The U. S. Government granted to the State of Wisconsin a large body of lands for railroad purposes. The distribution of these lands among the companies, depended on the Legislature. Accordingly, that body in 1856, passed an Act directing their appropriation to several companies. Among these was the La Crosse and Milwaukee Railroad Company. This transaction was charged with being corrupt, in consequence of bonds and stocks being given to members of the Legislature. A joint committee of investigation has reported these facts.

1. Eighteen members of the Senate voted for the Bill. Of these, *twelve* received in Stock and Bonds \$165,000, in sums of \$10,000 and \$20,000 each.

2. Sixty-five members of the House voted for the Bill; and of these, *fifty-two* received \$360,000 in Bonds and Stocks, in sums of from \$5,000 to \$20,000 each.

3. The members who voted *against* the Bill, of course received nothing.

4. The following State Officers received as follows, viz:

Governor.....	\$50,000
Comptroller.....	10,000
Lieut. Governor.....	10,000
Governor's Secretary.....	5,000
Clerks of the House.....	15,000

The Report then shows that \$257,000 in Bonds were also received by other persons, not members of the Legislature, or public officers.

The summary of their bribes is as follows, viz:

Paid Members of the Senate,	\$165,000
“ “ of the House,	360,000
“ State Officers.....	90,000
“ other persons.....	257,000
Aggregate Bribes.....	\$872,000

Taking this statement as true, it seems to us the La Crosse Company have paid pretty dear for their whistle. But what is the condition of those members of the Legislature, and State Officers? We have not heard the other side, if there is another side, but it is plain that no defence whatever can be made except by proving that the report is a mere fiction. If these Members and State Officers actually received these Bonds and Stocks from the La Crosse Company, it would be as vain

to defend them, as to defend a thief upon whom stolen goods were found. It can not be done. Such transactions as this make us act with fear. What is our country coming to? Where are we? In whom can we trust? It is high time that all men entrusted with the duty of education, or with power, should look to *integrity* as a primary principle.

RAILROAD TRAVELING ON SUNDAY.

We should have supposed that the *physical* not less than the moral history of mankind had sufficiently impressed the managers of public works with the fact that man can not do without a Sabbath, to have long since suppressed Sunday traveling, at least on railroads. We are glad to know, that on many railroads, no trains at all are permitted to run on Sundays, and on others only to a partial extent.

The following facts, in relation to the great roads, are reported by the New York Sabbath Committee:—

“It appears that five of the railroad companies run no passenger trains on Sunday, viz.: The Hudson River, the Harlem, (on their main line,) the Long Island, the New Jersey Central, and the Morris and Essex. The New York and New Haven Company run a mail train with one passenger car, on Sunday evening, for the accommodation of ‘those who must go on account of sickness or death, &c.’ and the average number of passengers for two years has been but fifteen each Sunday, while the usual daily average exceeds 3,000; demonstrating that ‘only the merest fraction of Sunday travel is necessary, and therefore right.’ The New Jersey Railroad and Transportation Company (from New York to New Brunswick) run only an evening train on Sunday, but no freight train is moved on that day; and an officer of that company expresses his satisfaction with the discontinuance of all other trains, as ‘conducive to the true interests of the company, in the increased efficiency of their operations and equipments, and the diminished liability to accidents, by not over-working the men, machinery and road, but giving to all one day of rest.’

The New York Central company ‘start no passenger trains on Sunday, but trains which leave either end of the road on Saturday evening go through. Freight trains run as little as possible on Sunday. The officer making these statements has ‘uniformly opposed Sunday trains. He says: The men require the repose of Sunday, and are fairly entitled to a day of rest. They work the better for it during the week. Besides, the great body of the passengers who go on Sunday would go on Monday, if the road were closed on Sunday. The company would be gainer by this.’”

The New York and Erie have resolved to discontinue all Sunday labor, except what is absolutely necessary. The Little Miami Railroad now runs no Sunday train, and the Cleveland and Columbus road run none. We hope, and believe the time is near at hand, when no decent railroad company will run trains on the Sabbath.

There are some remarkable examples to prove, that whether men admit the fact to be in the relation of cause and effect, or not, it is certain that Sabbath keeping is accompanied often with great success, when the contrary is attended by ill fortune. The New York and Erie Canal, it is said, knows no Sabbath; but, this great work, often rapidly rising to great success, has been for several years declining. On the other hand, the Delaware and Hudson Canal Company, with 4,000 men in their employ, have regularly ceased labor and closed their locks on Sunday, for twenty-three years; and yet, this company has been one of the most prosperous in the nation.

Experience has proved, even to physicians, that man needs as much rest as the seventh day gives; and that as much work can be done, and as well, in six days, as in seven. The American nation is a Christian nation, and it should be consistent with itself, and respect the institutions of its own religion.

Southern Pacific Railroad.

We call special attention to the proceedings of the stockholders of this company at New Orleans and Louisville, which we give below.

It is a great pity that this greatest of American enterprises should thus be crippled by the frauds of unprincipled politicians, and the hard earned money of honest men be thrown to the winds by those who lack the capacity to carry it forward to a successful termination. The view taken of the affairs of the company by the Louisville stockholders is a sensible and correct one, and their action should be imitated by others. There is no doubt there has been great frauds and over-issues perpetrated under the auspices of its original projectors; but it is patent that its Southern managers are not a whit more honest, and much less competent, than their predecessors. Or if they are, why procure the passage of a law through the legislature of Texas, during the winter just past, to legalize their present contemplated villainy. It would, no doubt, be a good thing for the company if its present managers could shake off the incubus of the fraudulent issues without affecting the *bona fide* stockholders; but this is impossible, and their present attempt to sacrifice the whole and put it in their own pockets, is as unjust as it is unnecessary. The charter, privileges, franchises, assets, and resources of the company are too great and valuable to be thus thrown away, and are abundantly ample, as set forth in the Louisville proceedings, to relieve the company of its embarrassments, if but the desire to do so existed on the part of its officers. This, however, is evidently no part of the programme; the whole will be sold for a mere song, and pass into the hands of a few who are behind the curtain. In all the official proceedings of the Southern offi-

cers of the company, they have ignored the existence of *bona fide* stockholders residing anywhere except in New Orleans; and the first intimation that holders of stock in northern states have had in reference to payments of instalments or other matters accompanied with penalties of forfeiture, &c., has been through the New Orleans papers exclusively, and the time fixed for them to comply with the requirements so short, that it was impossible for them to respond before it expired. And now right on the heels of having been told that the indebtedness had been arranged for, the deed of trust about to be raised, and that the affairs of the company were in a better condition than they ever were before, we have the denouement that all is lost. But we give the proceedings, and let those interested draw their own conclusions.

[From the New Orleans Picayune, May 13th.]

THE GREAT SOUTHERN PACIFIC RAILROAD FRAUD.

Meeting of the Stockholders at New Orleans.—
Meeting of Stockholders at Louisville.

Pursuant to adjournment, the Stockholders in this undertaking met at the office of the Company, yesterday, to receive the report of the committee.

Col. Kimore called the meeting to order; and Mr. T. K. Price, as chairman of the committee, handed him the following report:

NEW ORLEANS, May 12, 1858.

To the Stockholders of the Southern Pacific R. R. Co.:

Your committee, appointed in your behalf, to confer with the creditors of said road now in this city, in order to ascertain the amount necessary to be raised to relieve said road from its present embarrassment, beg leave to report:

That it will require about \$250,000; and under existing circumstances, your committee believe it wholly impossible to realize the amount, and could not advise at present further investments in said road; and in the event the same be sold, would recommend that the stockholders throw themselves on the liberality of the purchasers.

Your committee believe that your agent, the President, Geo. S. Yerger, has upon all occasions acted in good faith, and done everything that he believed to be for your interest, and has the entire confidence of your committee.

All of which is respectfully submitted.

THOS. K. PRICE,
M. PILCHER,
G. M. PINCKARD.

A discussion ensued as to the course to be pursued in dealing with the report. One gentleman wished the views and feelings of the stockholders present to be expressed as to the whole origin, proceedings, and management of the undertaking; but this was pronounced out of order. It was then moved that the report be accepted; but objection was taken that the debt, property and undertaking ought not to be abandoned in this manner.

Mr. J. W. Gurley was requested to act as Secretary. Mr. Fuller moved that a committee be appointed to inquire what would be the lowest amount with which the creditors could be satisfied, and spoke in high terms of Mr. Yerger, the President. The motion was not put, as it was objected that the report stated what would be necessary to be raised. A motion to request the creditors to come forward and say they would see *bona fide* stockholders protected on selling the road, and to adopt the report, was declared out of order. Mr. Upton moved to divide the report, lay the first portion on the table indefinitely, and adopt the other portion. This motion was carried.

Information was then called for as to the effect of the sale of the railroad, and particularly whether it would carry with it the title to all the property, privileges, grants and charter to the purchaser.

Messrs. Wigfall and Yerger, being called on, respectfully responded to this call, the latter gentleman reading a law of the State of Texas, passed in December last, referring to the subject, and that explicitly lays it down that in all respects whatever, except that of liquidating the affairs, the purchasers shall become the company.

Mr. T. K. Price said, that in order to save all useless discussion, he would state the condition of the company. He had, with other stockholders, put his \$2,500 into the undertaking, and with them he had been deceived and duped; not by anybody in the South, indeed, for he believed that everybody here had acted in the noblest spirit and the most perfect good faith. But there had been wrong done, and everybody knew, he believed, where to point to it; and the consequence was that their whole stock taken to the amount of \$318,000 was not worth one claw of tobacco, under the management of the old dynasty. This was the point of the affair. It was no use to go back to old matters. He would observe however, that notwithstanding all this there was nothing to prevent them from standing on their reserved rights. He saw many old and experienced

merchants around him who would understand what he meant by that. They had those rights, and he for one would use them. It would be no use to try to right matters now; for if the money could be raised, it would be throwing it away. He would not invest \$5 in it. They had been humbugged, not by any of our fellow-citizens, as he had said, but in the North.

Mr. Fuller moved the following resolution:

That a committee of three be appointed to make a report and history of this entire Pacific Railroad project, to censure any who may be entitled to censure, and to exonerate all who may be unjustly censured.

In support of it, he said that Mr. Yerger was like Caesar's wife, above suspicion, and that whatever wrong had been done, he had only been used as a tool. The project was got up by Robert J. Walker, at Niblo's Garden, in New York, and the first day the books were opened, he took \$10,000,000 of stock, and Mr. Joel G. Sever took \$5,000,000; they then went home to dinner, got drunk, and then went back and subscribed for further similar amounts. And at the very moment the shares were being so loudly recommended to us here, editors had come to him and offered them to him for less than they could be got for at the office. And what had been done with the money raised at Nashville, St. Louis and Louisville?

Mr. Fuller's resolution was amended so as to make the committee twelve in number, and then passed. It was agreed that the Chair should hereafter appoint the committee.

Mr. D. S. Bryan then moved the following resolution:

That a report be made of the stock subscribed since the office of the Company has been removed to New Orleans, and the amount of money paid on those subscriptions; also the amount of Stock issued.

This was adopted, and the Chair appointed Messrs. D. S. Bryan, R. A. Upton, and H. F. McKenna.

One or two gentlemen expressed the hope that something would be done to prevent the road from being sold, and the enterprise taken out of their hands; but nothing further was done, and the meeting adjourned to Saturday next, at noon.

ACTION OF STOCKHOLDERS AT LOUISVILLE.

[From the Louisville Courier, May 18th.]

A meeting of the Kentucky stockholders of the Southern Pacific Railroad was convened at the United States Hotel, in Louisville, Ky., on Saturday, May 15th.

Jacob Swigert, Esq., of Frankfort, was called to the chair, and Wm. C. Tyler, Esq., of Louisville, appointed Secretary.

Mr. Swigert stated that the meeting had been hastily called to take whatever action might be deemed necessary in an emergency that had just arisen.

Telegraphic dispatches from one of the directors in New Orleans were read, stating that the road and its franchises were advertised to be sold, at Marshall, in Texas, on the first day of June next, under the provisions of the deed of trust executed by the President in November, 1857, and that, unless prompt action was taken, the stockholders would be ousted from the possession of the road.

Several gentlemen who were present, and were familiar with the past history and present condition of the Company, gave the details of the Company's transactions, and arrayed evidences that just at the moment when the success of the enterprise was placed beyond any doubt, and its magnificent advantages and unparalleled promises of profit were rendered certain, an attempt to commit a monstrous fraud upon the stockholders and to divest them of their ownership in the road had been discovered.

Various methods of defeating the consummation of this fraud were proposed, and on motion, a committee was appointed to prepare resolutions.

The Committee reported the following, which were unanimously adopted:

WHEREAS, We have been informed that the Southern Pacific Railroad, together with all the rights and privileges thereto belonging, is advertised to be sold at public auction, at Marshall, in Texas, under a deed of trust, executed by the President of the Company; and whereas, from the information we have received, we believe that the President of the Company transcended his authority in the execution of said deed, and that the proposed sale would be a wanton sacrifice of the interests of the Company, and a great outrage upon the rights of Stockholders.

Resolved, That we call upon the President and Directors of the Southern Pacific Railroad Company, to take such prompt and immediate steps as may be necessary to prevent the consummation of the proposed sale, and to protect the rights and interests of the Stockholders from any sacrifice or detriment.

Resolved, That we regard the execution of said deed of trust as altogether unnecessary, and we pledge ourselves to resist any proceedings under it, and recommend our co-stockholders in other states to adopt similar action in the premises.

Resolved, That the editors of all newspapers in the city be request to publish these proceedings.

An interesting interchange of information and opinions as to the condition of the Company took place, during which the following facts were accurately ascertained:

The whole amount of the present liabilities of the Company does not exceed \$400,000.

Its assets are—
22 miles of road in running order, worth say.....\$660,000
Instalments to be received from Stock.....250,000
Bonds, mortgages, &c.....350,000
Lands already purchased.....250,000

\$1,540,000

Upon the completion of three miles more of the road, the Company will be entitled to 256,000 acres of land, which estimated at only two dollars per acre, will yield the sum of \$512,000.

A contract has already been made for the construction of 50 miles, making in all 70 miles of road, for which there will

have to be paid in cash \$12,600 per mile, and the total cost of which may be safely estimated at not more than \$22,000 per mile. Upon the completion of this contract, the Company will be entitled to 460,800 acres more of land, which, at the very low estimate of \$2 per acre, will yield \$921,600. Upon the completion of this contract, therefore, the Company will have seventy miles of the road in running order, and, after the payment of all indebtedness, will have surplus assets, even at this low estimate, amounting to about \$2,000,000.

From the statements made, it appears that the deed of trust was executed by the President, ostensibly to procure the completion of the first twenty miles of road in order to secure the charter. It was originally intended to cover only about \$40,000 of the debts, but has covertly been made to include all the indebtedness of the Company, but the parties who are understood to be urging the sale under the deed, control claims not exceeding \$100,000. It was stated by the President of the Company, in his circular letter of January last, that these debts had been provided for, and it was subsequently reported that the deed of trust was cancelled.

It appears, however, that the claims and the deed still exist, and it is presumed to be the object of parties urging the sale, to take advantage of the provisions of the deed, by forcing a summary sale without notice to the stockholders, or to any of the directors who are not in collusion with them, and, by becoming purchasers of the road, to secure to themselves the untold wealth to be derived from it.

Confidence was generally expressed by the stockholders in this meeting, that the consummation of this fraud would be arrested, and that with the removal of this single obstacle, the Company would go on steadily, in the enjoyment of the richest endowments ever conferred upon a railroad company, and be a source of great wealth to its stockholders.

Before the adjournment of the meeting, it was agreed that a competent and reliable agent should proceed immediately to New Orleans, and to Marshall, in Texas, authorized to take whatever steps may be necessary to protect the interests of the Kentucky stockholders.

JACOB SWIGERT, Chairman.

W. C. TYLER, Secretary.

ACCIDENT ON THE NEW YORK CENTRAL R. R.

A frightful accident occurred on the New York Central Railroad on the morning of May 11th.

The accident occurred to the Cincinnati express due at 6 30 A. M. It was somewhat behind at Whitesboro, and was coming at a high rate of speed when it met on the bridge over the Saquoit Creek, the Utica accommodation for the West, each on its own track. The engines crossed the bridge, but as the passenger cars of the express, and the freight cars of the accommodation came upon, the north side gave way, precipitating the freight cars into the creek, and piling the passenger cars one above the other, splintering platforms and seats to atoms as the cars struck the abutment.

Some seven or eight persons were killed instantly, and some forty persons were wounded.

This is by far, the most serious accident that has ever occurred on this road, and has created the utmost consternation throughout the whole country. Indeed the N. Y. Central, having passed into a by-word for safety, rendered the announcement of the casualty, the more startling. Cincinnati bears a very large share in this loss, and will long have cause to remember the fatal day.

We trust the time will come, when Railroad Companies will put up bridge structures with reference to safety, when wooden man-traps will be abandoned, and stone or Iron substituted. Financially speaking, it is short-sighted policy to build wooden bridges, when imperishable iron structures can be built at almost the same cost, certainly on short spans, not to exceed twenty-five or thirty per cent.

In this instance, as in all others, the evidence elicited, shows culpable neglect on the part of the management, and we doubt not but that it will receive its full and merited reprimand from the public.

RAILWAY TRAFFIC IN 1858.

That portion of the public interested in railroad stocks, are looking now with some anxiety to this year's results in railroad traffic. From 1855 to the present time, we have found, apparently, good reasons for a diminution of receipts on many of the roads; but looking to the crops of last year, and the increasing population of the country, we think stockholders will have to accept the results of 1858 as fair indications of what may be expected hereafter. One thing must be remembered, that during the last year or two, many of the roads have been diminishing their expenses, by cutting off some of their extra trains, and in some cases, diminishing the actual accommodation to the public. We believe this to be bad policy. It has, however, for the present time, diminished the expenses. The results for April, as far as we have seen, are as follows:—

	April 1857.	April 1858.
Little Miami Railroad,....	\$81,153....	\$91,804
North Missouri,.....	3,749....	14,067
North Pennsylvania,.....	19,354....	25,260
Michigan Central,.....	298,299....	293,010
Galea and Chicago,.....	194,217....	139,033
Chicago, Ber. and Quincy,....	115,832....	83,180
Wabash Valley,.....	31,368....	94,312
Milwaukee and Miss.,.....	46,000....	76,000
Baltimore and Ohio,.....	464,948....	485,595
Total,.....	\$1,265,024	\$1,231,562

Railroads.

ALABAMA AND FLORIDA RAILROAD.

The President of this road, in his Annual Report, dated May 1, 1858, says:

It is a fact significant of the vitality of the scheme which we are engaged in unfolding, that no retardation of any of its parts has occurred from effects immediately due to the panic in monetary affairs pervading the commercial world in the fall of 1857.

Ours is placed in favorable contrast with many similar enterprises throughout the country which have been greatly restricted, and, in many instances, entirely arrested in their progress by the depression of confidence, and consequently by the monetary embarrassment felt in almost every branch of industry, and from which neither America nor Europe has yet entirely recovered.

In the face of these inauspicious events, the contractors engaged in the construction of the entire road have maintained their operations, and the obligations which their contract impose.

The road bed has been steadily advanced, and its line now stretches beyond the 43rd mile post, within less than three miles of the State line of Alabama, where it will connect with the road leading to Montgomery. Portions of the embankments above the 37th and a half mile are in an incomplete state—work thereon being impeded by the rains and the spongy nature of the thin upper stratum of the soil. This section embraces a portion of the trestle work. The bridge over the Pine

Barren Creek, and several box and arch culverts remain to be constructed. The heavy rains whilst they have solidified the embankments, have in places washed them to an extent requiring reparation. Neither the remaining portions of the embankment, nor the repairs, involve heavy or difficult work for their completion;—these and the small extent of trestle work; the bridge over the Pine Barren Creek, and the unfinished culverts, can be completed in four or five months—thus placing the whole road bed sufficiently in advance of the track laying, to authorize the immediate commencement and vigorous prosecution of that portion of the structure to its completion.

It may be necessary to remind you that the contract with Messrs. Milner, Broughton & Co. provides for the entire construction of the road, embracing the track laying, but excluding the iron rails, chairs, spikes, &c., &c., which are furnished by the Company. These being duly provided, the contractors will complete their contract by delivering the road to the Company in perfect condition to receive its rolling machinery.

The progress of the road within the last three months required that a portion of the iron rails and fastenings should be procured. 1102 tons of rails were accordingly purchased, together with the necessary chairs and spikes, a locomotive and some cars required for the track laying.

The track laying has been commenced; and the work will be as rapidly advanced as the rails can be supplied.

A measure for finance has been devised by which the whole line of road from Pensacola to the State line will, in all probability, be opened to the trade and travel of the lower counties of Alabama by the 31st of December, 1858; affording a traffic that will not only pay the expenses for its support, but afford a margin of profits sufficient to pay the interest on the bonds issued by the Company for the completion and equipment of the road.

With a view to the heavy burdens, such as coal, iron, lime, marble, lumber, tar, pitch and turpentine, as well as cotton and the cereals; and beef, pork, flour, sugar, salt and coffee, that will be transported over the road when its connections are completed with Selma, Montgomery, the valley of the Tennessee, and the counties adjacent and beyond, it was deemed best as being most economical in the end, that a first class road in all its fittings should be constructed from the beginning. The things most essential in the construction of such a road, are—solid embankments—culverts and bridges of masonry, wherever it is possible to procure suitable materials for the same—a wide gauge—and iron rails of that weight and quality of materials, which experiment upon the roads of America and

Europe over which heavy burdens are transported, have proved to be the best. All these things have been or will be provided for. The road bed will have become compact and solid before the superstructure is laid upon it. Every covered culvert or drain has been constructed of stone; a small extent of trestle work and one bridge will be necessarily constructed of wood, the most part of which will be embanked, when the completion of the track permits the transportation of earth necessary to the work. The gauge is five feet, corresponding with that of all the roads in Alabama and Georgia, with which at no distant day our road must be connected. The iron rails are manufactured by Crawshaw, in Wales, of the best materials and in the best manner. The form is that of the "T. Erie pattern," and they weigh 58 lbs. to the lineal yard. This rail has been sufficiently tested in this country to prove its durability under the action of heavy locomotives and trains running at great speed.

Whilst all extravagance of expenditure in every branch of work and construction will be avoided as they have heretofore been, strict regard will be had to the permanence, commodiousness, and facility of enlargement of the buildings required at the depots and stations. The plan of the main depot; of the work shops; engine and car houses, &c., will be arranged with a view to their extension, in order to meet the wants of the trade that must be concentrated upon the road when its wide spreading branches shall have been completed.

It is expected that the increase of traffic, especially in coal, will require that another track should be laid down between Pensacola and the point where other roads in Alabama shall form connections with the main stem. In this event the additional track can be contracted at a reasonable cost. The greater part of the additional embankments and excavations required, will be very light; and no part of the track will involve heavy work either in embankments or culverts.

With a view to this inevitable enlargement of the road, it is proposed to commence the labor of it as soon as the means of the Company will admit.

The measure of finance just alluded to will, it is confidently expected, assure not only the early completion of the road, but place the Company in a condition to afford aid to other roads seeking Pensacola as the terminus of their respective lines.

The Pensacola City Company owning 7 or 8,000 lots within the corporate limits of the city of Pensacola have decided by an unanimous vote of the stockholders present at their periodical meeting in the city of New York in January last, to appropriate the proceeds of the sales of these lots, not exceeding \$350,000, to the purchase of the seven per

cent. 1st mortgage convertible bonds of the railroad Company.

These bonds will be purchased either directly of the Company, or of other persons to whom they may have been sold, or paid for materials and machinery—thus creating a market for these securities at a fixed rate of value. \$50,000 have already been disposed of at par.

The purchase of the remaining rails, rolling machinery and the erection of the depots, stations, etc., will depend upon the progress of the general construction of the road, and the means derived from the Pensacola City Company. Sales of lots have been appointed by the Trustees of that Company to take place on the 1st Monday in June, October and December, 1858.

The bonds authorized to be issued, consist of a series of \$800 to \$500 each, and are made payable in 20 years from the 1st July, 1859. The payment of these and the interest coupons is secured by a 1st mortgage on the entire road—its machinery and depots. And the bonds are made convertible into the stock of the Company at the pleasure of the holders.

The Trustees appointed under the mortgage to execute its provisions, reside in New York.

The whole amount of bonds is \$400,000. The length of the road is 45 miles, and it follows that its completion requires only \$8,888 88 per mile—to effect which the bonds are issued. The road being declared a first class one, and the great trade and traffic that must be concentrated upon it being acknowledged, the bonds, secured by a 1st mortgage, and bearing an interest of seven per cent. payable semi-annually in the city of New York, must at once be classed with securities of undoubted excellence and value.

These new measures of finance, adopted since your last meeting, having been stated, it is in place here to exhibit the financial condition of the Company up to this date.

The receipts from all sources up to the 30th April, 1858, are:

From subscriptions to Capital Stock in cash.	\$ 67,447 10
" Subscrip. in Bonds City of Pensacola.	250,000 00
" Notes payable.	70,620 41
" 2d Mortgage Bonds of the Company.	154,000 00
" Lands.	235 15
" Premium on Exchange.	515 08
	\$543,237 74

The total payments made or ready to be made are on account of—	
Construction of road bed, culverts, cross-ties, &c.	\$225,275 63
Contracts for rails.	59,545 71
Contracts for chairs, spikes, car wheels, &c.	4,114 41
Salary to Engineer, traveling expenses, office hire and other contingent expenses.	2,840 50
Exchange, insurance, &c.	515 08
Balance.	250,916 41
	\$543,237 74

The balance on hand consists of—	
Bonds of the City of Pensacola held for payment to contractors.	\$122,000 00
Bonds bearing 2d mortgage on the road, held for payment to contractors.	121,000 00
Cash.	7,946 41
	\$250,946 41

The Board of Directors have rigidly adhered to the system of economy adopted in the initiative of their proceeding, by which extravagance and unthrift so common to corporations, and so obstructive of the results desired to be obtained, have been entirely avoided; and I am sure that the statement of the financial affairs of the Company on that score, and upon others, can not fail to meet your approbation.

The estimate submitted in the report of the Board of Directors, July 26, 1856, for the total cost of the road—

Amounted to.	\$944,000 00
This estimate is modified by a reduction—	
In cost of iron rails, by.	\$60,000 00
" chairs and spikes.	1,500 00
" water stations.	1,000 00
" freight cars.	3,500 00
" passenger cars.	2,000 00
" baggage cars.	500 00
" locomotive engines.	3,500 00
" on Main Depot, work shops, &c.	8,000 00
	\$ 80,000 00

Exhibiting the reduced amount of cost at.	\$864,000 00
For contingent expenses of all kind which should be added.	20,000 00
	\$884,000 00

Total estimate cost of road.	\$884,000 00
To meet this amount, there has already been paid the sum of.	\$292,291 33
Cash on hand.	7,946 41
Bonds of the City of Pensacola, and the 2d mortgage bonds of the Company, on hand.	186,000 00
1st mortgage bonds of the Company already appropriated to the payment of rails, &c.	50,000 00
1st mortgage bonds of the Company, to be purchased by the Pensacola City Company, with the proceeds of the sales of their City property.	300,000 00
1st mortgage bonds to be disposed of when required.	50,000 00
	\$886,237 74

The proceeds of sales of the Company's lands have not been brought into the account of the assets of the Company. Sales will take place from time to time, and the proceeds held as a reserve fund. The Company are now in full possession of 86,000 acres. The remainder of the quantity donated by the United States has not yet been adjusted at the Land Office. About 50,000 additional acres have been allowed by the Land Commissioner, but the agent of the Company, claiming more, declines to accept that allowance.

The interest account on bills payable, and on the 1st and 2d mortgages bonds of the Company will probably amount, on the 30th of April, 1859, to.	\$ 27,000 00
The interest on the 1st and 2d mortgages will amount in the year ending the 30th of April, 1860, to.	38,780 00
	\$ 65,780 00

During the track laying up to the State line of Alabama the averaged traffic and travel of the road will yield a net profit of the road at least.	\$ 5,000 00
On the completion of the road, the trade with the lower counties of Alabama will be greatly expanded; and in the four months of January, February, March and April of 1859, we may fairly estimate the net profit.	10,000 00
Within the above named months, the road will, in all probability, be extended 35 miles into Conecuh county, Ala., so that we may estimate the net profit of its work to amount, during the year ending the 30th of April, 1860, to.	42,000 00
	\$ 57,000 00
Leaving a deficiency in the interest accounts of.	\$ 8,780 00

The sales of the Company's lands will afford a fund to meet the above deficiency and other unforeseen demands.

From the foregoing statements it would appear that the finances of the Company may be placed in a condition to meet all liabilities. The proceeds of sales of the lands, and the net earning of the road for the year ending the 30th of April, 1861, may be beneficially applied to the enlargement of the embankment, and to the construction of a double track.

In the course of that year, if not before, the whole line of road from Pensacola to Montgomery must be completed, placing Pensacola in connection with the system of roads pervading the northern and western portions of the country, and opening to our road a trade and travel, the advantages of which have been so often discussed and admitted that it is quite unnecessary to ask your attention to them at this time.

In 1863 the operation of the sinking fund provided for in the 1st mortgage bonds issued by the Company will begin—at which time the Company will possess ample means to appropriate the amount of \$15,000 per annum, payable semi-annually, due to that fund. By the proper management of the fund, the principal and interest of the 1st mortgage bonds can be paid off in sixteen years.

Under a prudent, honest and wise management of its affairs, your road may be made one of the most profitable roads in the United States.

The operation of the road lying in Alabama have been as vigorously prosecuted as circumstances would admit. The embankment, culverts, &c., are now being constructed from the terminus of our road at the State line, through Conecuh county, to the southern boundary of Butler county. The distance is 48 miles, and it is estimated that 25 or 30 miles of it will be in condition to receive the rails by the 21st December, 1858. The road bed has been completed 50 miles from Montgomery, a portion of which (34 miles) is supplied with rails and rolling machinery, and is now profitably worked, affording a handsome net income of 50 per cent. over all expenses of traction.

The whole extent of the road from Pensacola to Montgomery is 160 miles and 3,900 feet. Of this—

34 miles from Montgomery are now, probably, under operation.

16 miles of road bed are in readiness for track laying.

17 miles remain to be put under contract.

48 miles of the road bed in Conecuh county under contract.

45 miles in Florida are nearly in condition for track laying up to the State line.

160 miles.

During the past year some of the Georgia and Alabama road companies have not been indifferent to the importance of the connection of their roads with the Gulf of Mexico. The Directors of the Savannah roads have

caused a survey to be made from Franklin, on the Chattahoochee river, toward Mobile, with a view to the extension of the Southwestern and Savannah roads through the lower counties of Alabama. This line of survey crosses and connects with our road at a point a few miles above the State line. The location of the Mobile and Girard road has been changed from Union Springs so as to adhere to the valley of the Conecuh. The new line has been surveyed and fixed. It intersects with our road also at a point a few miles above the State line. The enterprise of the people of Mobile will undoubtedly cause the extension of those roads across the rivers Alabama and Tombecbee to that city, and thus afford to Pensacola communication with the counties lying west of those rivers and with the Mobile and Ohio Railroad.

The crossing of the Alabama and Tombecbee rivers and the surrounding swamps, at the point proposed, will involve the most skillful engineering; but the obstacles presented are not insuperable, and, although at great cost, the connection of railroads may be effected.

The people of Selma; the stockholders of the Alabama and Tennessee Railroad; and the coal field owners of Alabama, deeming a direct communication with the Gulf of Mexico of the greatest importance to their best interests, obtained a charter for a railroad to be extended from Selma to some point of the Pensacola and Montgomery road within Alabama or Florida. This line being established, the inexhaustible coal fields of Alabama; the rich counties of Dallas, Wilcox, Lowndes, Monroe; the western portions of Conecuh and Butler; and the fertile country bordering the railroads radiating to the north and west from Selma, will be brought into immediate communication with Pensacola.

The tendency of these railway lines throughout Georgia and Alabama, to concentrate upon the Pensacola and Montgomery road, is the natural consequence of the physical structure of the country, and the advantages possessed by the bay and harbor of Mobile for an extended commerce; and of the necessity that the facilities of intercommunication flowing therefrom should no longer be withheld.

It was attempted, in the first and second reports delivered at your annual meetings, to unfold to you the peculiar and striking advantages which your road possesses as being the sole stem of the railroad communications destined to connect Chicago and the West; the great lakes and the North with the best harbor on the Gulf of Mexico within the limits of the United States; as well as to illustrate the wide spread influence that Pensacola and her railroads would exert, in stimulating and supporting the prosperity of almost every section of the country lying between the

Mississippi and the Atlantic; the Gulf of Mexico and the Northern lakes.

The views then ventured to be taken were considered by many as beyond probable events, if judged only by the experience of the past. They extended beyond the horizon of those who looked to our road as one not exceeding in more than provincial importance—one that would pay its debts under good management, and in good time yield fair dividends derived from a traffic confined for the most part to the eastern section of Alabama.

The writer of the reports did not consider his estimate of the results that would in no long time be produced by your enterprise, as at all bordering on the extravagant. On the contrary, he refrained from an elaboration of the subject by which his real opinion would have been more fully expressed, fearing the very criticism, which, notwithstanding, he has not entirely escaped.

But he is happy to find that the progress of events, and the institution of new and successful railroad enterprises leading toward Pensacola as their natural and most convenient Gulf terminus, have converted the sceptic into a believer, and enemies into friends; and it is confidently asserted that there is no man present at this meeting, but what is convinced that the completion of our road and its connections now in progress, will rapidly raise Pensacola to a rank amongst the commercial cities of the South, second only to New Orleans.

The time is not far distant when you may be congratulated upon the termination of your honorable exertions to promote a great public good—a good that will alike be participated in by yourselves; by those in the community who have refused to co-operate with you, and by the country at large.

GREAT RAILROAD FRAUD.

On the 22d of April, Charles Gould, Esq., of Madison Square, attended by his counsel, A. Oakly Hall, appeared before Judge Russell to make a criminal complaint against Henry Dwight, banker and Broker of Wall street, upon which complaint, substantiated by the affidavits of Mr. Gould, and those of Samuel H. Blatchford, Seabury Brewster, and Stewart Brown, of the firm of Brown, Brothers & Co., warrants for the arrest of Mr. Dwight were issued by Judge Russell, and a warrant also for Mr. Henry Hotchkiss, formerly President of the New Haven County Bank, and Mr. Hamilton Spencer, formerly Vice President of the Chicago, Alton and St. Louis Railroad Co.

Upon these warrants Dwight was arrested at New York on Tuesday, and detained for examination.

The allegations in the affidavit of Mr. Charles Gould go to show that in June, 1850, the firm of A. T. Cowman & Co., of which one Benjamin Godfrey, of Alton, Illinois, was a member, contracted to build a portion of the Chicago, Alton and St. Louis Railroad, from Alton to Springfield, but the firm becoming unable to fulfil their contract, Godfrey be-

came their assignee and undertook its completion. Godfrey applied to Henry Dwight, banker and broker of New York, who had previously advanced \$170,000 to Cowman & Co., for further aid, in a sum which would make his loan amount to \$299,287, which Dwight agreed to give, provided that he received, in addition to Godfrey's own property, \$50,000 in bonds, and \$250,000 in stock of the Company, which was acceded to. Dwight then proposed to Godfrey to become his financial agent in New York city until the road should be completed, and that as it would facilitate him in raising money, it would be proper to have a member of Godfrey's firm (there was no firm then existing) in New York to sign copartnership notes, he proposed that one of his clerks, a James C. Smith, who was a minor under 21 years of age, and whose contracts were, consequently, worthless, should become his partner.

To this Godfrey, not knowing who or what Smith was, assented, and money was raised *ad libitum* on the notes of "Godfrey & Co.," signed by the infant Smith, on the strength of Godfrey's name. Dwight, before entering into this engagement, insisted upon Godfrey's assigning over to him all his property. Three of the then Directors of the company soon after resigned, and Dwight got two of his own friends—one of them his clerk—and himself, elected in their place. Soon after Dwight got the disbursement of the funds into his hands. He was then absolute in the Board of directors, for he had a majority, and caused it to resolve that it was expedient to issue \$2,000,000 of bonds, to be secured by a first mortgage on the company's property in Illinois. They issued a pamphlet stating that the amount of capital stock already subscribed and secured to the company was \$2,500,000, which the deponent asserts was a gross misrepresentation. \$2,000,000 of first mortgage bonds were placed in Dwight's hands, on which he realized \$1,717,402. Two more of the Directors resigned in December, 1852, and Mr. Dwight caused two more of his clerks—Kelso and Herwig—to be appointed in their place. The Board then consisted of Mr. Dwight, his confidential friend W. H. Platt, and his three clerks—Quintard, Kelso and Herwig.

The deponent charges that Mr. Dwight pledged \$2,000,000 second mortgage bonds for his own private debts; also for the same purpose \$230,000 of income bonds; that being a director in the Board, he caused sundry frauds to be committed for his own benefit; that he got into his possession, and had used at various times, four million dollars of mortgage bonds; and that none of them were used for the purpose of laying down a double track, as agreed upon by a previous contract, according to which he was to get six millions for laying such track and completing the road from Springfield to Joliet. The Report of the Chief Engineer of the road, Oliver H. Lee, showed it in a prosperous condition—the earnings being then (Nov. 1853) \$960,000 a year, but requiring \$800,000 to complete it to Joliet, which sum Dwight raised by passing his notes, endorsed by the Company, to the following parties:—New Haven County Bank, by Hotchkiss, President, \$65,000; Henry Hotchkiss, \$20,000; City Bank, New Haven, by Read, President, \$30,000; Merchants' Bank, New Haven, by Peck, President, \$30,000; S. D. Pardee, Trustee, New Haven, \$15,000; Phoenix Bank, Hartford, \$60,000; David Skatts, President of Seneca County Bank, \$10,000; Edmund Dwight,

New York, \$18,000; Wm. Swinburne, Paterson, \$52,000; Brown, Brothers & Co., (in iron) about \$200,000; Northern Indiana Railroad Company, \$300,000. Total, \$800,000.

Previous to this, Dwight had given mortgage bonds and stock of the Company as collateral security for his individual debts to several New Haven Banks, to the amount of \$1,183,000. These banks, therefore, had an interest in the management of the company, and they got Dwight to procure the appointment of Henry Hotchkiss as one of the Directors, to look after their interests, and the deponent charges that Hotchkiss became the tool of Dwight, and assisted him in the criminal proceedings with which he is charged.

Dwight set to work to get the whole board under his thumb, and finally succeeded in persuading those members thereof whose presence was disagreeable to him to resign, promising that he would put wealthy men in their seats. He got appointed in their place creatures of his own, among them Smith (the minor), who immediately took their seats and proceeded to execute a lease of the road and all its property, for twenty years, to a Mr. Hamilton Spencer, on conditions that he would pay off the debts of the company, and make certain annual payments to the company, provided that the income over the necessary expenses of the road would warrant him in so doing, which conditions deponent alleges Spencer never intended to fulfil, and that Dwight knew the fact, and appointed his friends on the board for the purpose of carrying out his plan.

Dwight and Spencer then obtained a loan of \$150,000 from Brown, Brothers & Co., giving Spencer's lease and a mortgage on Dwight's country seat at Tarrytown, Dutchess county, as security. When the shareholders and creditors became aware of this lease they were indignant, and consulted Greene C. Bronson and Samuel Beardsley, ex Chief Justices, on the matter, and they gave as their opinion that the making of the lease was a gross fraud, and that all the parties to it were liable to indictment for misdemeanor. Depo- nent charges further that Dwight, while a director of the Company, embezzled and converted to his own use \$24,000 income bonds, which he assigned to C. N. Potter. Dwight and Spencer were indicted by the Grand Jury for becoming parties to the fraudulent lease, and conspiring to defraud the creditors of the company; but as the indictment originated without preliminary investigation, Oakley Hall entered a *motu proprio*, on the grounds that the indictment would be quashed by the law of the Court of Sessions, stating that this was the sole reason, and not because he believed the facts in the case were defective. Dwight, alarmed at a threatened prosecution, confessed to the board that he had taken \$54,000 of income mortgage bonds, and offered to give an order for the restoration of the \$24,000 of the bonds assigned to Potter. The offer was accepted, but the order, if it was ever given, mysteriously disappeared, and was never used.

Depo- nent alleges that Dwight had taken \$10,000 of second mortgage bonds, with the understanding that they would be exchanged for bonds of numbers over 3,500, of which it had been decided to cancel \$500,000 worth, and that Dwight subsequently re-issued this \$10,000 worth of bonds of a number below 3,500, and appropriated the money to his own use. The next act of Dwight's board of directors was to sell the franchise and all the

properties of the company (subject to Spencer's lease) to a firm called Fullerton, Brown & Keating, of New York, they contracting to pay all the debts of the company, giving the preference to the claims of Hotchkiss' bank, Dwight and his brother, and other friends. The charter of the Company only extended to two years longer than the term of Spencer's lease. The laws of New York, the deponent states, being an obstacle to the designs of Dwight and his confederates, a meeting of the board was suddenly called, and it was resolved by a majority of Dwight's friends that the Board should meet in future in Bloomington, Illinois. Three of the directors, Hotchkiss, Wright and Quintard, then resigned, and Mr. Alexander, the Secretary, a creature of Dwight's, Mr. Henry A. Gardner, of Joliet, Illinois, and Dr. Spencer, a brother of Hamilton Spencer, were elected in their place.

Mr. Blatchford, who was then treasurer, seeing that a fraud was meditated, seized the books and papers, and got out an injunction from Judge Roosevelt, restricting the Secretary (Alexander) from touching them. The Board, however, went to Illinois, removed, by resolution Mr. Blatchford from his post as Treasurer, and Mr. Brewster from his office of President, and creating Gov. Joel A. Matteson, of Ill., President in his stead. Meantime Judge Roosevelt, on complaint of Mr. Litchfield, of the Northern Indiana Company and others, granted an injunction restraining Dwight, Spencer & Hotchkiss, and Brown, Brothers & Co., as assignees of the lease, and Fullerton & Co., from assigning or putting it in use, on the ground that it was made to hinder, delay and defraud the creditors of the company, and carrying out a fraudulent intent. An arrangement was subsequently made between Mr. Matteson and Mr. Litchfield, by which they guaranteed to pay the claim of Brown, Brothers & Co., that they would devote themselves for three years to the interests of the road and of Spencer's lease as long as it lasted, or of any new Company which might be formed, and that they would defend all suits against Spencer on account of his lease, and endeavor to procure the discontinuance of all suits commenced against Dwight or Spencer, with sundry other agreements, with the provision that when they were fulfilled, Spencer should surrender his lease to a new company.

It was further provided that all legal and just debts against the Company should be met, and all *bona fide* stock should be provided for, except such as was held as collateral for the payment of Henry Dwight's debts, thus sweeping out of existence all the shares hypothecated by Dwight for his private debts. Spencer accordingly surrendered possession of his lease to Matteson and Litchfield; but though for eleven months previous he had received all the earnings of the road, amounting to a million dollars, he never made any return of the same to the Company, nor did he pay Brown, Brothers & Co., the \$150,000 borrowed of them. Fullerton & Co., then advertised the road, its property and franchises for sale at public auction, subject to the lease now assigned to Matteson & Litchfield—the whole property being worth at least eight millions. The sale took place at the depot in Bloomington on the 15th December, 1856. There were present, as deponent alleges, Matteson, Spencer, Hotchkiss and Brown, one of Fullerton's firm, besides a few engineers, laborers, and clerks. One bid only was offered of \$5,000 by Matteson, and the road,

with all its property, in depots, engines, cars, franchises, &c., was knocked down to him. A bill was lobbied through the Illinois Legislature confirming the sale, and creating Mat-teson, Litchfield and their associates a new Company, with full power to run the line.

The deponent, Charles Gould, concludes by praying that a warrant of arrest may issue against the said Henry Dwight and such other persons who have been concerned and confederated with him as aforesaid, and that they may be dealt with as the law directs, upon those matters of conspiracy to defraud the said railway corporation, and of false pretences, and of forgeries, and of perjuries, and of embezzlements, and of false issues of stock and of bonds, and of fraudulently making of and putting into use, instruments to hinder, delay and defraud the creditors of the said railway corporation, which have been hereinbefore set forth at length.

This is the history of this extensive case of alleged fraud, involving charges of perjury, embezzlement and conspiracy against several parties prominent in commercial and financial affairs. The further investigation will, no doubt, bring forth many details of a startling character, which will throw much light on the mode in which the public are defrauded by the managers of large corporations.

FRAUDS IN MANAGEMENT.

We give our readers the benefit of a recent act of the English Parliament designed to put a stop in that country, to many of the ruinous operations for which the loose state of railroad legislation has given ample opportunity. The act in itself may suggest some valuable ideas to our own railroad managers.

The Act of the present Lord Chancellor we print below in its entirety, retaining the side headings in italic type.

It will be seen that the Act applies to ordinary trustees, to bankers, merchants, brokers, solicitors, and any agent "entrusted for safe custody, with the property of any other person," to persons acting under power of attorney, to bailees, to directors, officers, managers, and members of a public Company or body corporate, to persons receiving property fraudulently disposed of, to executors, administrators, liquidators under the Joint Stock Companies' Act 1856, and all assignees in bankruptcy or insolvency.

It will be observed that fraud must be proved; and, in some cases, a prosecution cannot be commenced without the previous sanction of the Attorney General.

As regards Directors, managers, officers, and members of public Companies, be it observed that the Act embraces *all* Companies, and that the offences are:—

1st. A Director, &c., fraudulently applying to his own use any of the Company's money or property.

2d. Omitting to make, or to have made, with intent to defraud, full and true entries in the books of accounts.

3d. Destroying, altering, mutilating or falsifying, with intent to defraud, any of the books, papers, writings, or securities, belonging to the Company, or making any false entry, or any material omission in any of the books of account.

4th. Publishing any written statement or account, knowing it to be false in material particulars, with intent to deceive or defraud.

In all these cases offending parties are guilty of misdemeanor.

The Act is clearly so very comprehensive and particular, that Directors, managers, and officials must be exceedingly circumspect in future. To "make any material omission in any book of account or other document" with intent to defraud, and to publish any materially false written statement with intent to deceive, is a misdemeanor. Directors, &c., must consequently be careful how they make up their accounts. Supposing, for instance, they intentionally omit to charge a current half-year's accounts with the full expense of maintaining the permanent way, publishing such account in the usual sheet of accounts, by which a larger dividend was paid than properly could be paid, would not that be a misdemeanor under the Act? Could not a purchaser of shares allege that the deception was to him, at all events, an important deception as to a material circumstance, since the omission has caused the dividend to advance, and consequently the shares to rise in the market, he having purchased on the strength of the increased dividend, and now finding that through the omission in question he has given more than the fair value of the shares?

It will be awkward, surely, in future, to attempt to job shares up and down by cooking accounts. It will amount to more than a row at a half-yearly meeting. There may be a prosecution for misdemeanor, and for misdemeanor punishment may be made to the extent of three years' penal servitude.

On the other hand, the Act will do an infinity of mischief if it should only in one case, as respects Directors and managers, be applied too harshly, and, in prejudice, unjustly; for what prudent man would, after such an instance, retain office in a public Company? The Act mis-applied, would drive from railway boards the very class of men which should be retained, leaving behind those reckless of character, for the sake of gain, whose presence, we need not say, is injurious. In order to guard against the serious evil to which we have pointed, the 13th section should be extended to all the Act, or at least to Directors, managers, &c., as well as to ordinary trustees under the 1st section. No prosecution under any section in the Act should be allowed to be commenced without the sanction of some judge or the Attorney-General.

ANNO VICESIMO AND VICESIMO PRIMO VICTORIÆ
REGINÆ.—CAP. LIV.

An act to make better provision for the punishment of frauds committed by Trustees, Bankers, and other persons intrusted with property.

17th August. 1857.

Whereas it is expedient to make better provision for the punishment of frauds committed by trustees, bankers, and other persons intrusted with property: Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords spiritual and temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

Trustees fraudulently disposing of Property guilty of a misdemeanor.—I. If any person being a trustee of any property for the benefit, either wholly or partially, of some other person, or for any public or charitable purpose, shall, with intent to defraud, convert or appropriate the same or any part thereof to or for his own use or purposes, or shall, with intent aforesaid, otherwise dispose of or destroy such property or any part thereof, he shall be guilty of a misdemeanor.

Bankers, &c., fraudulently selling, &c.,

Property intrusted to their care, guilty of misdemeanor.—II. If any person being a banker, merchant, broker, attorney, or agent, and being intrusted for safe custody with the property of any other person, shall, with intent to defraud, sell, negotiate, transfer, pledge, or in any manner convert or appropriate to or for his own use such property or any part thereof, he shall be guilty of a misdemeanor.

Persons under powers of Attorney fraudulently selling Property guilty of misdemeanor.—III. If any person intrusted with any power of attorney for the sale or transfer of any property shall fraudulently sell or transfer or otherwise convert such property or any part thereof to his own use or benefit, he shall be guilty of a misdemeanor.

Bailees fraudulently converting Property to their own use guilty of Larceny.—IV. If any person, being a bailee of any property, shall fraudulently take or convert the same to his own use, or the use of any person other than the owner thereof, although he shall not break bulk or otherwise determine the bailment, he shall be guilty of larceny.

Directors, &c., of any Body Corporate or Public Company fraudulently appropriating Property.—V. If any person, being a Director, member, or public officer of any body corporate or public Company, shall fraudulently take or apply, for his own use, any of the money or other property of such body corporate or public Company, he shall be guilty of a misdemeanor.

Or keeping fraudulent accounts.—VI. If any person, being a Director, public officer, or manager of any body corporate or public Company, shall as such receive or possess himself of any of the money or other property of such body corporate or public Company, otherwise than in payment of a just debt or demand, and shall, with intent to defraud, omit to make or to cause or direct to be made a full and true entry thereof in the books and accounts of such body corporate or public Company, he shall be guilty of a misdemeanor.

Or wilfully destroying Books, &c.—VII. If any Director, manager, public officer, or member of any body corporate or public Company shall, with intent to defraud, destroy, alter, mutilate, or falsify any of the books, papers, writings, or securities belonging to the body corporate or public Company of which he is a Director or manager, public officer or member, or make or concur in the making of any false entry, or any material omission in any book of account or other document, he shall be guilty of a misdemeanor.

Or publishing fraudulent statements guilty of Misdemeanor.—VIII. If any Director, manager, or public officer of any body corporate or public Company shall make, circulate, or publish, or concur in making, circulating, or publishing, any written statement or account which he shall know to be false in any material particular, with intent to deceive or defraud any member, share holder, or creditor of such body corporate or public Company, or with intent to induce any person to become a shareholder or partner therein, or to intrust or advance any money or property to such body corporate or public Company, or to enter into any security for the benefit thereof, he shall be guilty of a misdemeanor.

Persons receiving Property fraudulently disposed of, knowing the same to have been so, guilty of misdemeanor.—IX. If any person shall receive any chattel, or valuable security which shall have been so fraudulently disposed of as to render the party disposing thereof guilty of a misdemeanor under any of the provisions

of this act, knowing the same to have been so fraudulently disposed of, he shall be guilty of a misdemeanor, and may be indicted and convicted thereof, whether the party guilty of the principal misdemeanor shall or shall not have been previously convicted, or shall or shall not be amenable to justice.

Punishment for a misdemeanor under this Act.—X. Every person found guilty of a misdemeanor under this act shall be liable, at the discretion of the Court, to be kept in penal servitude for the term of three years, or to suffer such other punishment, by imprisonment for not more than two years with or without hard labor, or by fine, as the Court shall award.

No person exempt from answering questions in any Court; evidence not admissible in prosecutions under this Act.—XI. Nothing in this act contained shall enable or entitle any person to refuse to make a full and complete discovery by answer to any bill in equity, or to answer any question or interrogatory in any civil proceeding in any court of law or equity, or in the courts of bankruptcy or insolvency; but no answer to any such bill, question, or interrogatory, shall be admissible in evidence against such person in any proceeding under this act.

No remedy at law or in equity shall be affected. Convictions shall not be received in evidence in Civil suits.—XII. Nothing in this act contained, nor any proceeding, conviction, or judgment to be had or taken thereon, against any person under this act, shall prevent, lessen, or impeach any remedy at law or in equity which any party aggrieved by any offence against this act might have had if this act had not been passed; but no conviction of any such offender shall be received in evidence in any action at law or suit in equity against him; and nothing in this act contained shall affect or prejudice any agreement entered into, or security given by any trustee, having for its object the restoration or repayment of any trust property misappropriated.

No prosecution shall be commenced without the sanction of some Judge or the Attorney General.—XIII. No proceeding or prosecution for any offence included in the first section, but not included in any other section of this act, shall be commenced without the sanction of her Majesty's Attorney-General; or, in case that office be vacant, of her Majesty's Solicitor-General; provided that where any civil proceeding shall have been taken against any person to whom the provisions of the said first section, but not of any other section of this act, may apply, no person who shall have taken such civil proceeding shall commence any prosecution under this act without the sanction of the Court or judge before whom, such civil proceedings shall have been had or shall be pending.

If offence amounts to larceny, Person not to be acquitted of a misdemeanor.—XIV. If upon the trial of any person under this act, it shall appear that the offence proved amounts to larceny, he shall not by reason thereof, be entitled to be acquitted of a misdemeanor under this act.

Costs of prosecutions.—XV. In every prosecution for any misdemeanor against this act, the Court before which, any such offence shall be prosecuted or tried, may allow the expenses of the prosecution in all respects as in cases of felony.

Misdemeanors not triable at Sessions.—XVI. No misdemeanor against this act shall be prosecuted, or tried at any Court of General or Quarter Sessions of the Peace.

Interpretation of certain terms.—XVII. The word "trustee" shall in this act mean a trustee on some express trust created by some deed, will, or instrument in writing, and shall also include the heir and personal representative of any such trustee, and also, all executors and administrators, liquidators under the Joint-Stock Companies Act, 1856, and all assignees in bankruptcy and insolvency.

The word "property" shall include every description of real and personal property, goods, raw or other materials, money, debts, and legacies, and all deeds and instruments relating to or evidencing the title to any property, or giving a right to recover or receive any money or goods; and such word property shall also denote and include, not only such real and personal property as may have been the original subject of a trust, but also any real or personal property into which the same may have been converted or exchanged, and the proceeds thereof respectively, and anything acquired by such proceeds.

Act not to extend to Scotland.—XVIII. This act shall not extend to Scotland.

FOX AND WISCONSIN RIVER IMPROVEMENT.

The majority of the committee on Internal Improvements of the Wisconsin Assembly have just made a report, in which they express the opinion that it is a matter of prime importance that steamboat navigation should be opened between Green Bay and the Mississippi. Speaking of the land granted to the Fox and Wisconsin River Improvement Company, the Committee say:

The lands already selected by said company and confirmed by the commissioners of the land office, amount to 415,959.86 acres, according to the report of the select committee of the assembly of 1856.

In addition to the above quantity of land, the company claim, under an act of Congress passed August 3d, 1854, and a resolution adopted March, 3d, 1855, a tract of land equal in quantity to the alternate sections along the Wisconsin River, from Hortage to the Mississippi, which would add about 350,000 acres more to the improvement fund. These additional lands have been selected by the company, between the Wisconsin and Mississippi rivers, near the latitude of Green Bay; but said selections have not been confirmed to the company by the General Government, and consequently, according to the act of 1856, before referred to, there is no positive appropriation for any improvement of the Wisconsin river.

Your committee consider it important that the object for which this munificent grant of land was made by Congress, should be carried out in opening a steamboat navigation from the Mississippi river to Green Bay, not only for the purpose of doing justice to that portion of country bordering on the Wisconsin river, but also for the prosperity and credit of the entire State.

Your committee therefore recommend that a joint committee of five, two from the Senate and three from the Assembly, be appointed, who shall be instructed and empowered to visit the works and improvements of said company during the present year, and report to the Governor, prior to the session of the Legislature of 1859, whether or not the terms and objects of the grant are being complied with.

MONETARY AND COMMERCIAL.

Nothing unusual has transpired in the monetary market during the past week. The supply and demand for money continue nearly balanced; satisfactory paper is mostly taken up at 10 @ 12 per cent. Within the past few days considerable Lumber paper has been thrown on the market. The amount of capital in the hands of "outsiders" is somewhat on the increase, and they are disposed, in the rates they charge, to favor the borrowers. The truth is that our business men have learned a good practical lesson by their experience during the past nine months, and are working themselves more and more free from debt, and manifest but little disposition to "pitch in" again. Hence, the capital that has been floating about on business paper at from 2 to 4 per cent. per month, is now seeking mortgage security at much lower rates. Borrowing money, however, at 10 per cent. for building purposes has been found to be a losing game, and parties do not play at it to such an extent as formerly.

The Bank of Murfreesboro, Tenn., was discredited yesterday, and its notes are not saleable at present.

The earnings of the Erie Railroad for the month of April, 1857, were \$545,452 54, earnings of April, 1857, were \$526,020 40—increase \$19,029 14.

Noah L. Wilson has resigned the Presidency of the Cincinnati and Marietta Railroad, to take effect on the 1st of June.

The amount of coal shipped from La Salle, Ill., over the Central Road during the past year was 19,813 tons.

Breadstuffs are moving freely towards the seaboard, and will greatly increase the receipts of all our railroads during the present year; and if the officers have a due regard for economy in their working operations, the next dividends will be found to be greatly increased.

The amount of flour shipped by canal from Buffalo to the 15th inst., reach 58,173 barrels, while the entire shipment from that point for 1857, were only 88,092 barrels. During the week ending May 18th, 14,500 barrels flour were shipped from the above point by the New York Central, and 28,000 by canal.

Eastern Exchange continues dull at previous quotations.

The amount of specie in the New York banks May 8, was \$35,453,146, being an increase over the previous week of \$388,933. The increase on loans for the same period were \$873,499, and on deposits \$2,727,240.

SALES AT THE NEW YORK STOCK BOARD—May 17.	
\$5,000 Ohio State 6's, '60.....	102 3/4
1,500 do. 6's, '75.....	105 1/2
2,000 N. Car. State 6's.....	94 3/4
5,000 North Carolina State 6's.....	95
150,000 Miss. 6's.....	85
11,000 do.	85
11,000 Tenn. State 6's, '90.....	90 3/4
10,000 Cal. 7's.....	87 1/2
1,000 Erie Rds. '76.....	98
9,000 Erie 2d Mort. bonds.....	93
2,000 Erie Con. Bonds, '83.....	62 3/4
2,000 Harlem 1st Mt. Bonds.....	82
6,000 Mich. C. & N. Ind. Bonds.....	98
5,000 Ill. C. B.....	89 3/4
3,000 Virginia 6's.....	93
200 Shares New York Central.....	88
150 " Erie R. R.....	24 3/4
100 " Hud. River R. R.....	31 1/2
940 " Harlem R. R.....	12
10 " N. H. & Hart. R.....	118
50 " Mich. Cent.....	65
100 " Mich. S. & N. Ind.....	26
300 " Reading.....	47 1/2
100 " Mich. S. & N. Ind. pref.....	51
10 " Panama.....	110
10 " Illinois Central.....	91
10 " Cleve., Col. & Cin. R. R.....	93 3/4
116 " Galena & Chicago.....	90
200 " Cleveland & Toledo.....	44 1/2
100 " Chicago & Rock Island.....	78 1/2
100 " Milwaukee & Miss.....	30
20 " Pacific Mail St. Co.....	69 1/2
10 " Canton Company.....	21
50 " Del. & H. Can. Companys.....	107

LEHIGH COAL AND NAVIGATION CO.

The Lehigh Coal and Navigation Company's annual report was submitted at the meeting of the stockholders held on the 4th inst. It shows that the total shipments of coal on the Canal last year, were 900,314 tons, of which 390,427 tons were from the Company's mines. In addition to this, there were 15,839 tons taken from the Company's mines

at Tamaqua, and 4500 tons from the F vein. The coal by Canal was distributed as follows:—

Consumed on the line of the Lehigh navigation... 141,751
Passed over the Morris Canal at Easton..... 227,652
Entered the Delaware Division..... 530,911

Of the coal that entered the Delaware Division, 351,233 tons reached Bristol; 147,545 tons passed into the Delaware and Raritan Canal, via the outlet at Wells, Falls, and the navigable feeder of the last named work; leaving 32,133 tons as the amount consumed on the line of the Delaware Canal.

Shipments of lumber for the year were 43,149,477 feet.

Freights of all descriptions for the year 1857, amounted to:

Descending..... 1,042,070 tons.
Ascending..... 98,680 "

Total 1,140,650 "

The earnings and expenses of the year, with the amount of net profits, are shown by the following brief statement:—

Earnings in 1857..... \$593,290 85
Interest, repairs, &c.,..... 288,479 78

Net earnings 304,811 07

This is equal to an interest of over 12 per cent. upon the capital stock.

The Contingent Fund amounts at this date, to \$1,099,889 47, and is invested as follows:

Pennsylvania State Fives..... \$400,000 00
" Sixes..... 10,000 00
City Sixes..... 30,000 00
Pennsylvania R. R. 2d Mortgage Bonds..... 200,000 00
N. Pennsylvania R. R. 1st " 100,000 00
Lehigh Valley " " 16,000 00
Delaware " " 10,000 00
Lehigh Coal and Navigation Co's Sixes..... 333,889 47

Amount \$1,099,889 47

During the year the capital stock was increased by \$200. The aggregate indebtedness of the Company was reduced by \$35,139 57. The assets were increased by \$121,080 50. At the close of the year 1857, the liabilities of the Company, including Capital Stock, funded debt, and pecuniary obligations of every kind, and also including their own loans held in trust for the Company, were \$6,746,080 37. Deducting the last stated item, the aggregate was \$6,412,190 90. The usual semi-annual dividends of 3 per cent. each were declared, and a distribution of scrip, in the proportion of one share of scrip for every five shares of stock and scrip, was made among the holders of stock and scrip.

G. W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.
Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in a cases. ap16

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
NEW YORK CENTRAL RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, " "
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Panna, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

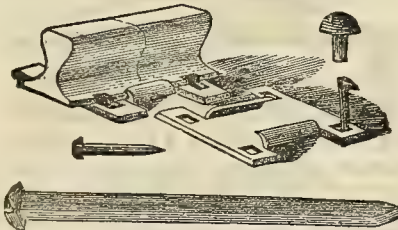
WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

to 9 P. M. H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

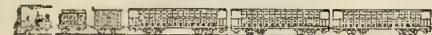
GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.

Please direct name in full.
Feb 28 CORBY, GOSSIN & CO.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even ing.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Sup'l.
Racine, May 15, 1857. my21

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filing the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5-tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

ly23-1m

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

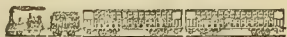
D. M. CARHART,
Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

Jr. 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
OR SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

IRON BOILER FLUES PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From ¼ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

**Warehouse, 209 South Third St.,
PHILADELPHIA.**

STEPHEN MORRIS,
THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. GOODMAN & CO.,
Feb. 7, '66-2m.] No. 7 Wall st., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

**Locomotive & Hand Lanterns,
ENAMELLED HEADLININGS,**

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at THE OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

JOEL C. LANE

feb4ti

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trellis B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet Bridging. 44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.

W. M. B. MURFORD, President.

Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,
1 n2j NEWARK, N. J.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheetings always Iron.

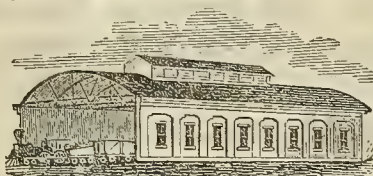
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.

may13. MOSELEY & CO.

DAVENPORT...M.D.WELLMAN...C.M.RUSSEL

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap as well as any other establishment in the States.

Feb. 16*†

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of
LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES
METALLIC SELF ADJUSTING CONICAL PACK-
ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C

aprl2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. Jun 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, 18.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

For the West and South. BALTIMORE AND OHIO RAILROAD.

Greatly improved schedule for
Summer Travel.

THREE THROUGH TRAINS DAILY

Between Baltimore and all portions of the West, South-west and Northwest.

On and after May 10th the Trains will run as follows:
First—The Baltimore and Cincinnati Express Mail starts (Sundays excepted) at 6 A. M., arrives at Wheeling at 12 20 P. M., connecting at Benwood with Central Ohio Trains for Columbus, Cincinnati, and intermediate points, reaching Cincinnati at 11 30 A. M.

Second—The Cincinnati and St. Louis Express leaves (including Sundays) at 5 05 P. M., connecting at Benwood at 9 30 A. M. with Express train for Cincinnati, reaching there at 3 P. M. next day, and connecting directly with Express Train for Louisville, Cairo and the Southwest, and for St. Louis, Kansas, &c. Time from Baltimore to Cincinnati only 27, and to St. Louis only 42 hours.

Third—The Cincinnati, Dayton, Indianapolis, Cairo, St. Louis, Chicago and Northwestern Express leaves (except Saturday) at 10 P. M., arriving at Wheeling at 5 50 P. M., and making close connection for all the above and intermediate points beyond the Ohio river.

Through Tickets and baggage checks for all the important cities and towns may be had at Camden Station and Washington city. To view the grand mountain scenery of the road in daylight, take the 6 A. M. or 10 P. M. train.

For Parkersburg, and all stations on the Northwestern Virginia Road, take the 10 P. M. train. For Cincinnati, Chillicothe, and other points on the Marietta Railroad, take the 10 P. M. train for Parkersburg.

For Way Passengers.

To all points between Baltimore and Piedmont take the 6 A. M. train. For all points between Piedmont and Wheeling take the 10 P. M. train. The 5 05 P. M. Express will only stop for wood, water and meals, at the principal first-class stations. The trains from the West arrive at Baltimore at 5 10 and 9 40 A. M., and 5 15 P. M.

The FREDERICK Train starts from Baltimore at 4 25 P. M., and from Frederick at 9 A. M., through in about three hours. The ELLICOTT'S MILLS Train leaves Baltimore at 8 A. M. and 5 30 P. M., and Ellcott's Mills at 6 45 A. M. and 3 P. M.

FOR WASHINGTON AND THE SOUTH.

Leave Baltimore at 4 20 and 6 45 A. M., and 3 and 5 30 P. M. On Sundays at 4 20 A. M. only. Leave Washington for Baltimore at 5 15 and 7 50 A. M., and 3 25 and 6 P. M. On Sundays at 3 25 P. M. only. The first and fourth from Baltimore and the first from Washington will be Express Mail trains, stopping only at Washington Junction for the western connection, and at the Annapolis Junction. The 6 45 and 5 20 from Baltimore and the 5 15 and 3 25 from Washington, connect with the Annapolis trains. The second trains from Baltimore and Washington connect at Laurel with Sandy's Spring and Brookville stages.

For Tickets of every kind, information, &c., apply to J. T. ENGLAND, Agent, or at the Ticket Office, Camden Station.

W. P. SMITH,
Master of Transportation.

L. M. COLE, General Ticket Agent.
my-20.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:50 P. M., making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Supt Terre Haute & Richmond R. R.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

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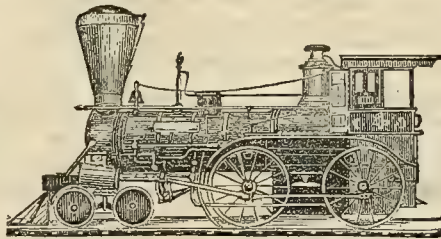
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FOR INDIANAPOLIS—At 6 A. M. and 2.20 P. M.
FOR LAWRENCEBURG AND AURORA—At 5.45 P. M.

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And to all Eastern and Northwestern Cities.

SIX DAILY TRAINS

Leave the Sixth street Depot as follows:—At 6 A. M. (Columbus time), 7:30 A. M., 9 A. M., 2:15 P. M., 3:45 P. M., and 6 P. M.

LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburg, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:32 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo. Connects at Bellefontaine direct for Pittsburg and Philadelphia, reaching Pittsburg at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPOUT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M. for Toledo and Chicago. Also connects at Sandusky with

"STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburg and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

FARE TO ALL POINTS AS LOW AS BY ANY OTHER ROUTE.

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Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

Leave Hamilton at 6:30 and 9:37 A. M., and 12:10, 1:5 6:55 and 10:15 P. M.

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Union Works, Baltimore.

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Locomotive Works,

SCHENECTADY, N. Y.

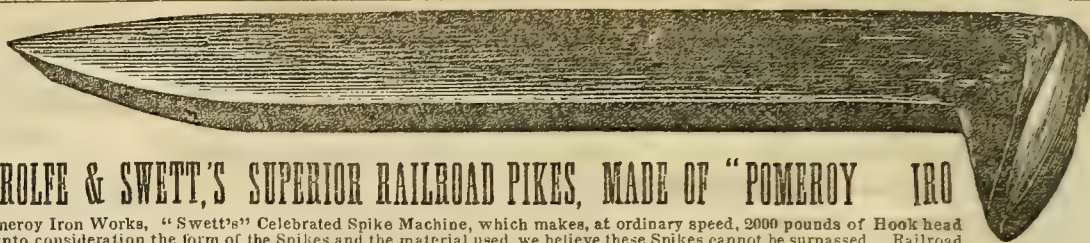
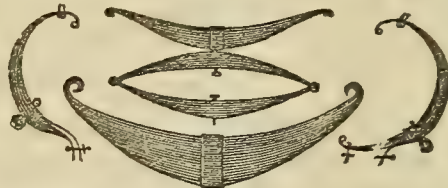
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E. D. MANSFIELD, - - - } Editors.
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THURSDAY MORNING,.....MAY 27, 1858.

Railroad Record

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THE DELTA OF THE MISSISSIPPI AND ITS COMMUNICATION. INFLUENCE OF RAILROADS.

The Delta of the Mississippi, (by which we mean all the Mississippi Valley below the mouth of the Arkansas river,) affords one of the fairest fields for railroad enterprise. It is a vast country, and will be an immensely productive one; in which all natural modes of conveyance, whether by land or water, are precarious and dangerous. The introduction of the steamboat was a vast benefit to the country, but the steamboat is nothing for such a country, in comparison with the Locomotive. The steamboat meets with innumerable difficulties which a Locomotive would not. This arises from the nature of the country. The whole of the lower valley of the Mississippi is alluvial or made ground, and almost the whole of it is in a state of transition, or movement. There is very little actually permanent territory in that whole country. The lakes, the bayous, prairies, the changing course of streams all prove that the Delta has once formed a part of what we call the Gulf of Mexico, which has been gradually filled in by a conglomeration of sand from above, of

vegetable deposits, of shell formations below, and of vegetable growth above. One of the remarkable phenomena which attest this is the “cut off” of the Mississippi. In some instances, the Mississippi has changed its course, so as to cut off ten and twenty miles. This it could only do, in consequence of the looseness, and recentness of the earth; composed as it is mostly of loose deposits, and recent vegetation. Another of these phenomena is the vast rafts of the Red river, and the Atchafalaga. The rivers have so little power and velocity, that they cannot overcome obstructions, caused by floating timber, which is thrown down by the washing of the loose earth. Great masses of trees and shrubs are thus jammed up in the stream of even great rivers.

In time, they become too firm to be removed by any amount of water. The celebrated raft of Red River was of this description. So the alluvials around and at the bottoms of small lakes. Many of these lakes exist in Louisiana, Mississippi, and Arkansas. Of the formation, Derby thus speaks, in his account of the formation of one of them; “but what renders this lake an object of peculiar interest, is the proof it affords of the continual change effected, in those alluvial regions, by the slow, but never ceasing action of water. The medium depth is from 15 to 20 feet, and at the lowest stage never less than ten or twelve, along the principal body of water, though the remains of cypress trees of all sizes, now dead, and most of them, with tops broken by the winds, yet remain standing in the deepest part of the lake.” This character of transition, with the great obstacles in the rivers, and the dangers of navigation, make the valley of the lower Mississippi a fine field for railroads, where suitable routes can be found. Derby, who wrote his account of Louisiana in 1815, thus speaks of one of the land “cut offs,” which may be made. “From the afflux of the Atchafalaga to the Opelousas, is thirty miles in a direct line, and the windings necessary for a road would not exceed fifty miles; to which add fifteen from the afflux of the Atchafalaga to the highlands east of the Mississippi would amount to sixty-five miles from one extremity of the overflow to the other. The present circuitous route, by water down the Mississippi and Plaquemine, and up the Courtoleau and Atchafalaga to Opelousas is from the one point to the other upwards of two hundred miles. Should the raft ever be removed out of the Atchafalaga, the distance from the afflux of the river to Opelousas down its current to the mouth of Courtoleau, and up the latter river will amount to seventy miles.”

This was written about forty years since when Mr. Derby knew nothing about Railroads; but the principle which he stated is true yet. The road which he describes has been trans-

ferred to New Orleans, and is a Railroad; because New Orleans is a great commercial city. But Mr. Derby's idea still remains a good one. A Railroad from Opelousas to Natchez, and from Opelousas continued West, would be a route saving an immense distance of Steamboat navigation to accomplish the same purpose. It would make the great route for southern Texas.

We give this simply as an illustration,—changing currents and circuitous routes of the streams, make Railroads peculiarly necessary for the Lower Mississippi. It is true, that the want of dense population will be an obstacle to profitable roads, if they are made very expensive. But there is no need of this. Railroads in the South should be built on the cheapest possible plan, and by running only a daily passenger train, will bring their expenses so much lower than those of northern roads, that they may yet be profitable. But, in fact, the Southwest has not reached, by any means, the proportion of Railroads which it should have for its population. In all of Louisiana, Arkansas, Mississippi and Alabama, there are not over 450 miles of Railroads. The government has given those states a great quantity of swamp lands. If they should appropriate them to building railroads, they would make those very lands, now almost worthless, of incalculable value. A wise foresight suggests that economical Railroads, (and there are such,) would incalculably increase the wealth of the Southwest.

CENSUS OF THE STATE OF NEW YORK.

From an abstract prepared by the *Journal of Commerce* of this work just issued by the State, we extract the following introductory table, giving the comparative results of the national and State census for twenty years:

	National State		National State	
	Census, 1840.	1845.	Census, 1850.	1855.
Total population.....	2,458,921	2,664,495	3,097,394	3,466,212
Males.....	1,231,170	1,311,362	1,567,941	1,727,650
Females.....	1,197,751	1,293,153	1,529,453	1,738,562
Number of whites.....	2,378,890	2,559,148	3,048,325	3,420,936
Males do.....	1,207,237	1,241,489	1,416,273	1,543,826
Females do.....	1,171,653	1,313,659	1,632,052	1,877,113
Colored persons.....	50,277	50,277	49,069	45,286
Males do.....	23,809	23,809	23,452	21,777
Females do.....	26,468	26,468	25,617	23,509
Number of voters.....	59,379	59,379	652,322	652,322
Native do.....	.....	.....	516,745	516,745
Naturalized do.....	.....	.....	135,577	135,577
No. deaf and dumb.....	1,107	1,062	1,963	1,422
No. Blind.....	875	877	1,141	1,136
No. Insane.....	2,146	2,168	2,521	2,742
No. Idiots.....	1,630	1,661	1,661	1,812
Marriage (prev. yr).....	27,781	27,781	15,732	21,106
Births (prev. year).....	42,938	42,938	37,639	51,082
Deaths (prev. yr).....	26,264	26,264	45,844	46,297

By the above it will be seen that the State of New York has increased in the total number of inhabitants in the past ten years 861,717, of whom 416,298 were males, and 445,419 females; and that there are 10,912 females in the state more than males. That in the last fifteen years the number of negroes in the State has decreased 4,741. The number of marriages during the year 1854 decreased 6,677 as compared with the year 1844, when there was nearly a million less of inhabitants, while there was an increase of 7,144 births, and 10,912 deaths during the same year as also compared with 1844.

The extreme duration of life reported in the

present census was 100 years, and the number one hundred years old and upward was ninety-two. The number of persons of extreme age in a given country is found to be but an uncertain indication of the general average of human life.

The number and per centage of our population in 1855, born in the several sections of the Union, and in foreign countries, is as follows:

ORIGIN OF THE POPULATION OF NEW YORK.

	Number.	Per cent.
New York.....	2,222,321	64.077
Connecticut.....	63,681	1.863
Massachusetts.....	57,680	1.642
Vermont.....	54,556	1.565
New Hampshire.....	14,941	0.431
Rhode Island.....	11,737	0.339
Maine.....	5,818	0.168
New England States.....	207,539	6.004
New Jersey.....	40,391	1.164
Pennsylvania.....	31,472	0.907
Southern States.....	13,124	0.378
Ohio.....	5,256	0.151
Michigan.....	3,413	0.098
Illinois.....	1,255	0.036
Wisconsin.....	1,163	0.034
Indiana.....	616	0.017
Other States.....	183	0.005
United States.....	2,524,444	72.903
At sea and unknown.....	17,749	0.512
Foreign countries.....	922,019	26.585

The number of churches in the State is 5,077; value of churches and lots, \$27,769,328; number of sittings, 2,141,159; number of persons usually attending, 1,124,211; number of church members, 702,384; salaries of clergy, including the use of real estate, \$2,411,683.

The number of newspapers in the State is 559, and of other periodicals 112. Aggregate circulation of dailies, 312,783; semi-weeklies, 40,387; weeklies, 1,294,340; semi-monthlies, 264,600; monthlies, 1,287,650.

SOUTHERN PACIFIC RAILROAD.

We intimated the other day, that it would not, perhaps, be a very lamentable result if the Southern Pacific Railroad should be sold for its debts, under the deed of trust executed in Texas, for the benefit of its creditors. We are now forced to the conviction, by the developments of the meeting of the stockholders, that the sale of the road, under the circumstances, would not only be the least of alternative evils that could happen to the *bona fide* stockholders individually, but would be a positive public good, by conducing to the firm establishment and uninterrupted progress of the road itself.

It is clear that the affairs of the company have come to a dead lock. It is equally clear that the stockholders despair of extricating themselves from thickening troubles. The plain meaning of their action was to do nothing—to let things take their course—to resign themselves to the inevitable. They felt no assurance that, even should they raise the \$250,000 necessary to cancel the deed of trust, and save the road from sale, they would be on safe ground, encumbered as the company is with bogus stock and gambling stockholders.

We may take for granted, then, that the road, its charter, franchises, &c., will be sold at Marshall, Texas, on the first day of June next. We may assume that the creditors, mostly residing in Texas or this city, will be the purchasers for about \$250,000, the aggregate of their claims. For this they will have 25 miles road bed, 2 locomotives and the appurtenances, worth at least \$900,000; together with 236,000 acres of land, worth at least \$1 per acre; making a total value of \$455,000.—*N. O. Delta.*

The above extract from the New Orleans Delta, shows the hand of the "high-minded gentlemen," who have undertaken to cleanse this Company of "fraud and corruption." It is certainly one of the most cool, calculating and unblushing pieces of swindling, that has ever met our notice. It is bad enough for stockholders to be swindled, but to be fairly told of it, and to have the amount of the gain of their perfidy counted up and shook under your nose besides, is rather too bad; and all this too in the same breath with windy resolutions about

the honor, integrity and high-minded character of its present managers, as composed with its original proprietors.

The President of the Company in his report of December 22d, 1857, says:

"Arrangements have been made by which all the debts embraced in the deed of trust are provided for, and by which the deed of trust will be cancelled."

The New Orleans Crescent of March 25th, also contains a semi-official communication, relative to the delinquent stock, and was sent to us with a request to publish, by one of the Directors, in which it says:

"But, in order that there might be no reasonable grounds for complaint, on the part of delinquent stockholders, and to enable them to redeem their stock if they saw fit, the Secretary of the company has been directed to inform such stockholders, 'that the purchasers of stock sold by this company on the 17th of February last, have agreed to allow the former owners the privilege of redeeming the same, by paying the instalments due, until the 16th of April' next; and he is further directed to say that 'all stock not redeemed by that date will be transferred on the books of the company to the purchasers thereof.' This is about as fair a proposition, the circumstances taken into consideration, as any reasonable man could desire."

We also gather from the Crescent of May 17:

"That of the sum of \$42,750 of subscriptions remaining unpaid, \$30,000 thereof stands opposite the name of Geo. S. Yerger, for himself and friends, and \$5,000 opposite the name of A. B. James, and \$5,000 opposite the name of C. W. Allen, \$1,000 opposite Mr. Johnson, by Mr. James as agent; \$1,000 opposite that of Mr. Labouisse, \$500 opposite that of N. R. Jennings, and \$250 opposite that of Mr. Maes."

We put these things side by side, so that our readers may see who the delinquents are—what means have been taken by the management, 1st, to depreciate the stock, then to cajole as much of the assessments from the pockets of *bona fide* stockholders, into their own pockets as possible—in what way these efforts have continued until now, by extending the period from time to time, during which, by the grace of the purchasers of the forfeited stock, the stockholders may reclaim their property; and yet, while some of the instalments are still on their way, we are told that stockholders are about "to do nothing, to let things take their course—to resign themselves to the inevitable." And that the *dear creditors* of the Company, for whose benefit an executive officer, who owes the Company \$30,000 in back instalments, or if you please for a bogus subscription, made this deed of trust, and procured the passage of a law to legalize the deed, will make a handsome speculation of not less than \$606,000 by the operation.

THE STORM—DAMAGE TO RAILROADS.

The continuous and heavy rains of this Spring, followed up by the great storm of Monday and Tuesday of this week, has seriously injured almost every Railroad leading into this city. Indeed, for a day or two the running of trains had to be suspended, until temporary arrangements could be made for crossing the breaks, made by the washing away of bridges, embankments, culverts, &c. Great care should be exercised by Track-masters, Superintendents and Directors of Railroads in their supervision of those repairs, not only to render their Road safe for the transit of passengers and freight, at the present time, but also with reference, as much as possible to the protection of their Roads from the recurrence of similar disasters. Examine most thoroughly the banks and abutments of every bridge and culvert, over which your trains have to pass. Let it be done, too by parties who are competent, and do not over-

look it because the structure is *small*. A little labor expended in this way, may save many lives and much treasure.

✧ The earnings of the Pittsburg, Fort Wayne and Chicago Railroad Co. during the month of April, were as follows:

Gross earnings for April, 1858.....	\$137,060 23
Earnings for same month last year.....	162,742 30

Decrease (15 8-10 per cent.)..... \$25,682 27

The Expenses in April were as follows:

Gross expenses for April, 1858.....	\$73,740 51
Expenses in same month last year.....	77,704 28

Decrease (5 2 10 per cent.)..... \$3,963 74

Net earnings in April, 1857.....	\$63,319 99
Net earnings in April, 1858.....	63,319 99

Decrease in net earnings..... \$21,718 33

It is said that a contract has been entered into between this Company and the Pennsylvania Railroad Company which insures the completion of the Pittsburg, Fort Wayne and Chicago Railroad to Chicago by the 1st of November next. The work is progressing vigorously, with that view. The Pennsylvania Road and this road will then be operated in harmony, under one policy, constituting them, for all practical purposes, a single through line of 818 miles from Philadelphia to Chicago, and reducing the distance between New York and Chicago to 906 miles.

IRON AND OTHER MATTERS.—The Iron Mountain Railroad in Missouri is nearly completed up to Pilot Knob. A correspondent of the *St. Louis News* says:

"It gives us pleasure to record, also, that this great national work is one of the few that have been constructed wholly with American iron. It would, indeed, have been a crowning indignity to American industry, if imported rails had been employed on such a work; but we are happy to say that there is not a foreign rail in the whole road, the entire lot having come from the works of Wood, Morrell & Co., Johnstown, Pa."

IMMIGRATION FOR FIFTEEN YEARS.—The returns made to the State Department of the number of emigrants arriving at the various ports of the United States in each year since 1844, have been communicated to the House of Representatives. The following is the recapitulation:

Year.	Males.	Females.	Sex not stated.	Total.
1844.....	48,297	35,877	—	86,764
1845.....	69,179	49,311	1,406	119,896
1846.....	90,914	66,778	897	158,649
1847.....	139,189	99,325	990	239,472
1848.....	136,128	92,763	472	229,443
1849.....	179,235	119,915	512	299,663
1850.....	200,904	113,392	1,438	315,334
1851.....	28,282	27,107	181	65,570
1852.....	145,017	163,745	66	408,828
1853.....	235,731	160,174	1,438	397,343
1854.....	236,732	164,178	75	401,985
1855.....	284,887	175,587	—	460,474
1856.....	140,181	90,333	12	230,476
1857.....	133,308	99,188	—	232,496
1857.....	163,538	109,020	—	272,558
Total.....	2,343,181	1,556,753	7,084	3,907,018

Of the immigrants of 1856, 43,562 declared their intention to become citizens. One-third of last years immigration was from various Germanic States. The year 1850 was census year, hence it is divided in the table.

(Correspondence of Railroad Record.)

ON THE IMPORTANCE TO THE COMMERCIAL WORLD OF AN INCREASE IN THE QUANTITY OF SILVER.

Silver mining is entitled in these days—besides the usual motive of gain which stimulates in all branches of industry—to be patronized by commercial men on account of the facilities which its production affords to trade. The immense increase in the amount of the gold currency of the world by the discoveries in California and Australia, and the continued accessions to it which we expect in the future from those mines, and from those of Russia, presents an anomaly which has seldom, if ever before, occurred in the history of the world. Whilst gold is accumulating by the ton, silver is not, in value, accumulating in proportion. There is no reason to doubt, from general experience, as well as from general considerations in relation to the structure of nature, that in the beds where it has been deposited, the amount of silver is proportionate to the proper uses of it by man to the amount of gold so deposited. By properly proportionate is, of course, meant conveniently proportionate in the transactions of business, and in the household uses to which it may be advantageously applied. Gold is, evidently, the *metallic provision* made by the infinitely wise Creator and Ruler of nations for the large transactions of business; and by proper coinage and the formation of it into bullion (bars or ingots,) may answer most of the extensive transactions of business with the requisite dispatch. Gold also is the proper representative of *paper* money, and of drafts of any considerable amount so far as these latter are really useful in business transactions. And I am disposed to assign to it, and to let it have, its appropriate place in such transactions. But whatever may have been the proper minimum of bank note issues fifteen years ago, the immense additions to the gold currency in the world, now strenuously indicate the propriety of making twenty dollars (20) the minimum quantity of any one bank note. In general, for safety, for security against fraud, and with ample convenience to all parties concerned, all small sums are best payable in silver. And to induce a proportionate valuation in silver equal to its manifest safety—and required by the prohibition of all bank notes under twenty dollars, it should be enacted that debts of five dollars or less might be payable in silver coins of any amount coined; debt of ten dollars or less in silver coins of the value of twenty-five cents (25-100) or over; and debts of twenty dollars or less, one half in coins of twenty-five cents, fifty cents, or one dollar; and the other half in coins of fifty cents or one dollar, at the option of the debtor, it being a proviso in the law upon the subject that no coins should be payable in such cases but those which are recognized to be such by the

laws of Congress. It should be further expressly enacted, that banks, as well as individuals, should be compelled to receive silver in payment for their debts in the amounts and of the coinage which I have specified in all debts due to them of the grades mentioned; and that in regard to depositors, they should be compelled to receive twenty dollars in every hundred in silver, if the depositor so wished.

If we look attentively at the commerce and business transactions of any great civilized nation, we shall find, that upon an average of a long series of years, probably not exceeding twenty-five, the minor transactions of business are very nearly equal in aggregate amount to those of a wholesale character. In such nations as I have named, they do, in each current year, approximate each to each in quantity or amount. The case of stocks may readily illustrate this idea. These stocks, when offered by government, and subscription is made to them, often remain in the same family or individual for many years—even for half a century. This one great business transaction, then, takes place but once in all those years; but the dividends upon the stock continue until it is redeemed, and the multiplication of those dividends in these minor transactions, does, in a series of years, even far exceed the amount of the principal. Now for the minor transactions in dividends, and in mercantile business also, silver is indispensable, that they may be accurately performed. The Mexican and South American revolutions for many years materially checked the production of silver, and it has lost its due proportion now in the circulating medium of a large part of the world. And while a great diminution has occurred in the production of silver, there has been a vast augmentation in that of gold since 1848. California has produced more than four hundred millions; Australia, probably, more than two hundred and fifty millions; and the Russian mines one hundred and twenty millions, being the enormous total of more than seven hundred and seventy millions of dollars—about fifteen hundred and thirty tons of gold, (1530). No one will suppose, who exercises due consideration, that I mean, in the slightest degree, to complain of the vast addition to the former amount of gold since 1848; on the contrary, I am fully persuaded of its generally beneficial effects; that which I am in pursuit of, is a still further amelioration, by the introduction of a *proportionate* amount of silver. From 1848, the era of the California discoveries, production of gold has been increased greatly disproportionate to that of silver. A writer in Blackwood* thus graphically, and in the main correctly, describes the immediate beneficial effects on the fortunes of mankind in general, and of England in particular, by the

discovery of California gold, and the amount of it obtained and brought into circulation even as early as January, 1851.

"The future destinies of mankind, and of this country in particular, seemed, therefore, involved in clouds and darkness; nor did any means appear to be within the bounds of possibility, by which the difficulties which beset or awaited industry could be obviated. * * A serious contest took place with Mexico—California was wrested from them; and by the ultimate effects of that conquest, some of the greatest evils inflicted by human selfishness or folly, were alleviated, and the destinies of the world were changed."

He continues: "It is impossible as yet to say, with positive certainty, what is the amount of gold which may be obtained for a long period from this auriferous region; but it is already evident that it will be very great; much greater than was at first anticipated."

Page ninth, he further remarks: "Mr. McCulloch observes, in his Commercial Dictionary, 'Should eight or ten millions† yearly, in addition to the present supply, be obtained from any other source,‡ it will produce a gradual alteration of prices, similar to that which took place three centuries ago, on the discovery of the mines of Mexico and Peru.' No one can doubt that the observation is well founded; but if the effect of eight or ten millions sterling, annually added to the treasures of the world, would be so considerable, what must be the effect of the addition of eighteen millions; yet this addition is now going on." This was about seven years ago; but Australia has since supplied a large addition to this great amount, and we may now estimate the annual increase of gold at more than twenty millions sterling or over one hundred millions of dollars beyond the supply which the whole world furnished in 1848.

"The first effect," Blackwood remarks, "of a great addition being made to the annual supply of a particular metal in general use, and in high estimation all over the world is, that the exchangeable value of that metal in comparison with other metals or articles of consumption, will undergo an immediate alteration which will prove lasting and considerable, if the increased supply turns out to be great and permanent. This is no more than takes place every day with all the articles of commerce. According as the crop of wheat, or oats, or barley, or cotton, proves abundant or scanty, so surely does the price of these articles rise or fall in the market. If gold is produced in much greater quantities than heretofore, its price, as compared with every thing else, and in particular with the precious metal in common use next to it in value, sil-

† Pounds sterling.

‡ Referring to the sources from which it was at that time procured.

* January, 1851—"Currency Extension Act of Nature."

ver, must ere long change. If the increased supply prove very great, it may, in time to come, reduce the price of gold, as compared with silver, fifty, eighty, or a hundred per cent."

Such an effect actually occurred some years ago. In order to counteract the effect of this upon the transactions of business—causing an immense drain of silver to Europe—the United States Congress wisely passed a law by which nearly seven per cent. increase was effected upon the value of the then existing legal dollar. That is, they reduced the amount of silver in the *new* dollar so far below the old dollar. This was absolutely necessary for the purpose of retaining even a tolerable supply of silver among us. In the year 1854, the coinage in gold at our mint showed an immense disproportion, which still largely continues. Throwing aside fractions, it was as forty-eight millions to six millions; but this is not the true amount of relative production—nearly all the gold coined was fresh from the mines; but, probably, one half the silver was silver already coined, sent to be recoined for the gain of the seven per cent. by the new coinage over the old. The act of Feb. 23, 1853, made the half dollar of the weight of one hundred and ninety-two grains; the previous act (at that time in force, but now repealed), the act of January 18, 1837, made the half dollar (section 9th) to consist of two hundred and six and one-fourth grains, making a difference per cent. of 6.91-100, or nearly seven per cent. After deducting one half or three millions of dollars from the amount of silver, and leaving three millions as new silver not previously coined, there remains but three millions in silver, and as all the gold is that year's production of gold—forty-eight millions—the relative proportions in value of the production of silver and gold is for that year as 3 to 48, or but 1-16 (one sixteenth), which is much too small for the proper uses of commerce. To counteract, therefore, this great disadvantage to commerce, and properly to fill the channels of small circulation with silver—which would, in its absence, be choked up with the pernicious material of a small paper circulation—it is important to encourage silver mining. The other measures suggested are also of very great importance in order to remove the unjust disability under which silver labors, by making it a legal tender to the extent before designated—twenty dollars,—and in the manner that has been mentioned, and by prohibiting all bank notes under twenty dollars.

The mines of Arizona are, it is highly probable, destined, at no distant day, to furnish an abundance of silver. The evidence of their probable productiveness is very strong, and enterprising and capable men appear to have the management of them. W. A.

Railroads.

CINCINNATI, WILMINGTON & ZANESVILLE RAILROAD COMPANY.—REPORT.

It affords me pleasure to be able to inform you, that the business of this road, as well as its fiscal condition, has been far less affected than railroads generally, by the many influences, which, during the past year, have operated so injuriously upon the railroad interest of the country at large. Not only have the current expenses been met, but the property of the company has been materially enhanced in value, by various improvements and additions chargeable to construction.

The gross earnings for the year have been \$223,505 82, being \$11,946 48, or .0534 per cent. less than those of the preceding year. This falling off is attributable to causes beyond our control—such, for instance, as the exorbitant price charged by miners ($3\frac{1}{2}$ to $5\frac{1}{2}$ cts. per bushel) for coal on the cars, at the banks; the high charge for its transportation made by one road, and the exorbitant price by the other, on both of which we are now dependent to reach the markets of large consumption, has prevented the development of the coal business, and will prevent it so long as the entrance into Cincinnati and Dayton is exclusively by the present channels, and localize its consumption, confining it to a people who are accustomed to wood, as an article of fuel, and which can be bought at a rate that makes it no object to them to dispense with it, while the present price of coal is maintained.

The financial revulsion, which has just swept over the country, has also affected our receipts, in proportion as it has diminished the importation of merchandize, the exportation of produce, and checked our local trade and travel. A large proportion of the produce of the country is still in the hands of the farmer, and is but slowly being brought to market.

The exceedingly good navigation of the river has tended materially to lessen the rates for transportation of freight, (diminished as was the supply), and this, coupled with the ill-judged efforts of one road (by its agents) to divert freight from another, has enabled shippers, in many instances, to dictate their own prices. Had it not been for the superiority of the grades, the good condition of our road, its special adaptation for freight, and being a *shorter line*, we would have been unable to have made any profit at the prices forced upon us by the suicidal policy of the "Great Eastern Lines," which have initiated this ruinous system, and which, if persisted in, needs no prophet to foretell its ultimate effects on long, roundabout routes.

The gross amount of revenue received from all sources for the past year was \$268,257 17, and the gross amount of expenditures for the same period were \$250,076 07.

In the selection of Tools and Machinery, care has been taken to secure the best, and those only that were necessary.

The non-maintenance of the road, machinery, and cars, in a high state of repairs, has made the expenditure heavy in the repair department; the items bear favorable comparison, nevertheless, with other roads, and indicate economy.

The repairs the coming year will also be heavy; as much work remains to be done, to place the rolling stock and superstructure in the condition necessary to minimum cost of maintenance.

All repairs are made in the most thorough manner, and when extensive, embrace those available known improvements and conveniences that unquestionably add to safety and economy.

PASSENGER TRAINS.

The passenger trains have been run with a degree of success rarely attained, and without accident or injury to employees or passengers. The success of running may be inferred from the fact, that one of the conductors ran an entire year, three hundred and thirteen consecutive days, and lost only one connection (that loss was caused by the washing out of a culvert), and when it is remembered that our trains, when in motion, have to run from thirty to thirty-five miles per hour, to secure connections with the roads on which we are dependent at either terminus, this fact is almost without parallel.

The gross earnings of passenger trains have been.....	\$97,721 04
Gross expenses of ditto.....	89,413 90

Net earnings.....	\$8,277 14
Average number of passengers per train.....	17

The number of passengers carried to and from each station, were 80,261, yielding \$52,486 30, or, per person, \$0 65.39.

The number of passengers carried to or from local to foreign stations, with coupon tickets, were 16,513, yielding \$31,366 76, or, per passenger, \$1 89.9. This last item embraces but a small portion of the large number of passengers who pass to and from local points to the city, who only purchase tickets to Morrow.

There belong to the department eight engines; eight first class, two second class, and four baggage cars. One of the first class cars has been rebuilt, two need overhauling, and with the five others must be repaired, etc. One second class and two baggage cars have been thoroughly overhauled, and repainted; the other three require to be similarly treated. The trucks of these cars have at all times been maintained in thorough order, to preclude all possibility of accident that human foresight could prevent.

FREIGHT TRAINS.

The freight trains have moved with regularity, and unusual freedom from casualty,

and without serious injury to the persons of employees and others.

The gross earnings of freight trains were :

Through Freight.....	\$ 8,022.90
Local Freight.....	93,018.54
Coal.....	94,743.34
Total.....	\$195,784.78
Expenses.....	103,773.91
Net earnings.....	\$92,010.87

Average number of Tons Freight, per Train.....100,125
Miles run, by Freight Cars.....1,058,966
Average number of Tons, per car, per mile run... 4.31
" distance whole number tons carried.....66.17
" number of loaded cars, per train.....14
Ratio of loaded to empty cars, hauled one mile...72 to 28

The following amount of freight was delivered by the Cincinnati, Wilmington & Zanesville Railroad to the Little Miami Railroad :

For Cincinnati, Coal.....	25 64 Tons.
Freight.....	8,897.80 "
For other points, Coal.....	11,156.90 "
Freight.....	2,103.24 "
Total delivered to L. M. R. R.....	22,189.98 "
And amount received from L. M. R. R.....	5,904.87 "

Or the large amount of.....16,278.11 "
more freight given to the Little Miami Road than received from it.

The Cincinnati, Wilmington and Zanesville Railroad have delivered to Central Ohio Road, and through it to the Baltimore and Ohio Road :

For Bellaire, Live Stock to amount of...	7,512.45 Tons.
Flour.....	8,993.39 "
Other Freights.....	3,458.49 "
For other points, Freight.....	63.91 "
Total delivered to.....	20,030.24 "
And am't received from the C. O. R. R. to be.....	1,954.81 "

Or the large amount of.....18,775.43 "
more freight given to the Central Ohio and Baltimore and Ohio Roads than received from them.

The revenue derived by the Little Miami Railroad from freights from the Cincinnati, Wilmington and Zanesville Railroad, amount to the sum of \$36,071.54, and that the revenue derived by the Central Ohio Road from the freights from the Cincinnati, Wilmington and Zanesville Road, is \$37,725.86.

There belongs to the department eight engines, one hundred and two box, thirty-two stock, eighty-five coal, and twelve platform cars, all eight wheeled. Fifteen box cars have been overhauled, reroofed, repainted, and fitted with new draw bars, attached to the floor beams. Four additional springs have also been added to each car. Forty-eight box, stock, and coal cars overhauled, repainted, and fitted with new draw bars. There are twelve box, five stock, four coal, and five platform cars undergoing or needing repairs.

The sixty-three cars first referred to, are so improved that they are better than when first built. The balance will require heavy repairs and similar improvements. The changes of draw bars and additional springs will materially cheapen repairs, and the capacity of the cars will thereby be increased twenty-five per cent.

The average miles run by each engine is 19,010. The cost of repairs 7.34 cents, engineers and firemen 4.05 cents, and of oil and waste 1.26 per mile. The distance run to each pint of oil 13.98 miles.

All the engines are superior and of proper capacity. Those which we have been able thoroughly to repair, are provided with such extra conveniences as not to require the attention of the driver to be diverted from the lookout, and for performance and adaptability are what is required, and not surpassed by those on other roads.

ROAD DEPARTMENT.

In the road department there are eight platform cars for construction and wood purposes, two semi-platform cars for wood-sawyers, and all are eight wheeled; also 50 four wheeled gravel, 25 hand and 25 truck cars.

The bridges, trestle work and culverts have received all needful attention, and barring the effect of time are in good condition. One hundred and fifty new floor beams have been added to seven most important bridges on the lower end of the road. The chords of the bridges will have to be renewed during and extending through the next three years.

It is the intention to take down all the truss bridges which span sloughs and sluggish streams, and substitute simple girder bridges on piles. The removal of this class of bridges, although requiring some money for the new timber, yet in the end will be attended with no cost, as the old ones will furnish a mass of the best quality of white pine lumber, available for other purposes for which timber would have otherwise to be purchased. The removal of these bridges will take away so many liabilities to the killing of freight train men, the trusses not having been built sufficiently high to allow a man to stand on the cars and clear the overhead beams.

Twenty thousand ties and three hundred tons of iron will be wanted this year.—The iron for the purpose of extending side tracks; the ties for renewal.

Depot grounds at the different stations suitable for road purposes, have been, to a limited extent, provided, so that future expenditures for depot purposes at these places may not be lost. It will be necessary to secure ground at all points where not now provided.

At Sligo a store and warehouse, with $1\frac{1}{2}$ acre of land, have been donated to the road.

At Wilmington a rearrangement of alley and change of land rights, enabled the road to make a permanent station, most acceptable to that town.

At Berne one acre and spring were secured.

We hope to be able this year to erect a building at Lancaster, to be used for painting cars, and to enlarge our facilities for repairs at Putnam. These improvements, with the inclosing of the grounds at Machine shop, will complete the wants in the shop department.

We are also in hopes before the close of the coming fiscal year, to be able to say that the ballasting of the entire road has been completed; as also all the grounds at the different stations, for permanent depot purposes, secured.

These indispensable matters once provided for, and no longer a tax on revenue, will enable the road to provide, at an early period, all the conveniences necessary to secure and do a maximum local business at the minimum cost.

"Loughridge Patent Brake" has been applied to two passenger trains, and will be to the other two. The known saving in number of cattle killed on this road since its introduction, had it no other merits, makes it an invaluable auxiliary that no road should be without. It has saved one train from precipitating down a bank thirty feet high, and on another occasion at least one human being's life.

I have been thus particular in details, that the stockholders, creditors and bondholders could realize the roads value as a property. The information contained in the last Annual Report, and that in the "Expose of January 1st, 1857," will, if carefully studied, enable the true position and wants of the road to be realized, and indisputably point out the only remedy by which it can be raised from a mere self-sustaining property to one of profit, and protect the stockholders against creditors.

The causes by which this property, which has cost \$4,133,945.73, has become of use only to the country through which it passes, and to its employees, as a means of support, or, in other words, non-productive and useless to its owners, are not inherent in the road itself, nor does the fact of its being non-remunerative thus far, carry with it the supposition that it must always be so, and that it is beyond redemption; on the contrary, the fact that its failure is not inherent, and the cost of the remedy being, so far, within the means of the private purses of its owners and creditors, the wonder lies only in the fact that it has been allowed to remain in such a state so long. Collateral matters may have had their influence, but the real cause of all your embarrassments is the failure to construct, according to the original intentions of your charter, the *Cincinnati Extension*; or, in other words, to continue the road to the point from which at first it should have started. To this alone can you look for relief, and through it only will relief come.

If, within twelve months, the road is not placed in a commanding position, extended to Glendale, and thence through the Cincinnati, Hamilton and Dayton Railroad into the city, and in direct connection with the Ohio and Mississippi, and Indianapolis and Cincinnati Railroads, at the extreme western

verge of the city, and that without passing through it, subject to municipal control. *It has the vantage ground and is invulnerable*, as the distance saved between Morrow and the point of junction with those two roads is over four miles, *two of which is now overcome by an omnibus and dray transfer*, and which annoying disadvantage the Little Miami Road will forever have to contend with, unless it should adopt our line from Morrow to the city for its through business—a privilege which, if granted on any thing like retaliatory terms, would not be very acceptable.

This direct connection will save fully two hours' time to passengers, to or from St. Louis and the Eastern cities over the Little Miami route, and one day for freights; and at once places the Ohio and Mississippi and Indianapolis and Cincinnati, with the Cincinnati, Wilmington and Zanesville Road, in the position to contest successfully for business against the northern routes, and then will be restored the long diverted travel between the West and the Southwest, and Cincinnati again be on the great highway of commerce, which she so pre-eminently enjoyed until the opening of the canal between the upper Illinois river and Chicago, facilitated the diversion of the trade from the Ohio river route to that of the Lakes, and through the early completion of the two Michigan Railroads has been there maintained, excepting what has more recently been diverted by the Bellefontaine and Central routes.

To your coal trade the penetration of the Great Miami Valley is a desideratum. That valley, unlike the Little Miami Valley, now alone penetrated by your road, is densely populated by a coal consuming people, and will afford of itself a market at this time for one million of bushels, if furnished at a cost not exceeding 12½ cents, which we could do at greater profit than is realised on our present coal trade.

Again, through the direct connections which the Cincinnati, Hamilton and Dayton Road would afford us with the Hamilton and Eaton, the Junction, the Indianapolis and Cincinnati, and the Ohio & Mississippi Roads, we would nearly if not quite monopolize the best portion of their local produce trade, as also the merchandize from the east, as they would have no adverse interest.

The outside cost of the extension, when complete, will not exceed \$500,000. It can be opened for business for about \$433,000. These estimates are based upon cash, and on the supposition that the period of construction will not extend beyond ten months.

The act of incorporating the Cincinnati, Wilmington and Zanesville Company furnishes all the chartered rights. Or the work can be done under the charter of the Cincinnati, Lebanon and Xenia Company, between which Company and yours there exists true and harmonious relations. Or it can be con-

structed under a special organization, conforming to the general Railroad bill of Ohio, if thought best, when the time for commencing the work arrives.

All negotiations have been made and contracts closed with the several corporations west of Morrow necessary to enable the trains of the Cincinnati, Wilmington and Zanesville Road to pass into and out of Cincinnati, the same as if she owned every mile of the line. Therefore all that is now required is the money. A reasonable share of the \$433,000 must be provided by you. It is known that at least one hundred thousand dollars can be had from the Lebanon interest. The recent determination of the Tunnel Company to proceed in the construction of the road from Sharon north as far as their unexpended means will allow of, will lighten the burden some \$75,000 more, as by contract (the three miles north of Sharon, occupying by reason of the peculiar physical features of the country a common line), the Cincinnati, Wilmington and Zanesville Road secures its use, in common with the Tunnel road, for the annual rental of six per cent. on the money invested by said Tunnel Company on that section.

The *laint* or doubt that is attached to the securities bearing the name of the Cincinnati, Wilmington and Zanesville Road is the reason for proposing to construct the Extension under another charter; and that there might be no question as to the intrinsic value of the securities to be issued, provision has been made for the appropriation of all earnings from trains on the road west of Morrow to inure to those contributing to its construction, and on the road east of Morrow, to the benefit of the stockholders and creditors of the old corporation.

The value of the securities in the Extension will depend upon whether it is built with cash realised from stock only issued at par, and the work done rapidly and in small sections by hard working contractors, whose compensation is cash only, or by construction under a contract, the consideration principally being securities.

Although the Hamilton and Dayton entrance would not enable us to so effectually avail ourselves of the many advantages incident to the Tunnel connection, or develop the coal trade to the extent therein indicated, yet the advantages of the direct rail connection with the several roads penetrating Indiana, would more than make up the same on other freights, etc.

This connection effected, places Cincinnati on the great highway as heretofore, and through the Cincinnati, Wilmington and Zanesville, in connection with the Ohio and Mississippi, and Indianapolis and Cincinnati Roads, with their multifarious connections, there will be found a tide of traffic ample for all centering at Cincinnati. The financial situation of the road east of Morrow does not

appear promising on paper; but once let our receipts reach that point where a margin can be made, a clear business head and straight forward course will soon wipe out the hypothecated debt, and the profit and loss account become an enviable item.

I have thus fully indicated the course which, in my humble opinion, should be pursued. It is the only one that will save your stock from entire loss. It can not be delayed with safety, as the interest on the debt will soon swallow up the stock.

MEETING OF THE STOCKHOLDERS OF THE SOUTHERN PACIFIC R. R. COMPANY.

CINCINNATI, May 20, 1858.

Pursuant to a call in the several daily newspapers, a meeting of the stockholders in this road, resident in Cincinnati, was held at No. 14 Fifth street, at 3 o'clock, P. M.

T. F. Baldwin, Esq., was appointed chairman, and A. C. Bagley, Secretary.

Messrs. J. M. Carwell, John Tait, T. H. Johnston and A. C. Bagley were appointed a committee to prepare resolutions, and to report at an adjourned meeting.

Voted to adjourn till May 21st, at 3 o'clock P. M.

Met according to adjournment, and John Tait, Esq., was chosen Chairman, *pro tem*.

The Committee reported the following Preamble and Resolutions, which were unanimously adopted.

WHEREAS: It has been represented to us, Stockholders in the Southern Pacific Railroad Company, residing in Cincinnati and vicinity, that a deed of trust was executed by the President of said Company, in November last, for the purpose of securing a debt of \$40,000; and Whereas, by the report made by the President in December last, we were led to believe that said deed of trust had been cancelled, and that the affairs of the Company were in a prosperous condition, such as would justify us in anticipating an early prosecution and ultimate success of this great enterprise; and Whereas, we have recently received the astounding information that the Road, with all its property, and franchises, is to be sold on the 1st day of June next, under said deed of trust, to pay said sum of \$40,000 together with other indebtedness covered by said deed, the precise amount of which we are not informed; and Whereas, it is represented to us that the whole indebtedness of said Company does not exceed the sum of \$250,000, a sum which we deem insignificant compared to the value of the interests involved; and Whereas, it has been represented to us that fraudulent issues of the stock of said Company have been made to a large amount, for which little or no value has been, or ever will be, received by said Company.

Be it therefore resolved, That we are convinced of the importance and practicability of a Railroad to the Pacific, and that we believe the Southern route is the only one upon which a road can be constructed in any reasonable time, and that the Southern Pacific Railroad Company should now be possessed of ample means, with faithful and economical management, to insure the early completion and triumphant success of the undertaking, and render it not only profitable to stockholders, but of immense value to the country at large, and one of the greatest achievements of the age.

Resolved, That notwithstanding the present apparent gloomy aspect of the affairs of the Company, we have implicit confidence in the eminent capacity and unyielding integrity of President Yerger and his Southern associates; that it is to them we look for protection and justice, and that we hold ourselves in readiness to furnish our full proportion of the "material aid" necessary to carry out any plan for the relief and furtherance of the interest of the legitimate stockholders, that the present management may in their wisdom devise and recommend.

Resolved, That while we are ready to encourage and co-operate with any practicable movement that may be made, looking to the rejection and repudiation of any and all fraudulent stock to whomsoever issued, and to a thorough purging of the affairs of the Company, yet we will not tamely submit to have our rights and interests summarily sacrificed, without even the opportunity of protecting ourselves; but we will use every available legal means to retain the position we are by right entitled to as legitimate stockholders, having subscribed for and paid our stock in good faith.

Resolved, That the proceedings of this meeting be published in the Cincinnati *Gazette*, and the Secretary be instructed to transmit a copy to the President of the Southern Pacific Railroad Company.

J. M. CARWELL,
JOHN TAIT,
T. H. JOHNSON, } Committee.
A. C. BAGLEY,

Adjourned, sine die.

John Tait, Chairman, pro tem.

A. C. Bagley, Secretary.

CONTRACT OF GUARANTY OF DIVIDENDS ON RAILWAY STOCK.

In the Pennsylvania Supreme Court the case of Thomas Struthers vs. Merrit Clark, came up on a writ of error from the Common Pleas of McKean county. The opinion of the court was delivered by

WOODWARD, J.—This case was treated in the court below as if it involved no other question than the measure of damages. The only objection to that mode of stating the question is, that it does not go to the root of the matter. The measure of damages is indeed a question in the case, but that depends on the meaning of the instrument of guaranty. The question therefore which lies at the bottom of the case is a question of construction. Did the parties contract that the capital stock of the Rutland and Washington Railroad Co. should yield annually six per cent. dividends for three years, or did they intend that the defendant would secure to the plaintiff that rate of profit for three years on the two hundred shares mentioned in the guaranty.

The first thing to be regarded in getting at the meaning and intention of contracting parties is the language they have employed.

They begin by reciting the issue to Struthers of a certificate of two hundred shares of the capital stock of the Rutland and Washington Railroad Company, and then follows the guaranty in respect to "said" stock. This word "said" may, without violence to language, be referred to either of the two antecedents—the general stock of the Company, or the particular two hundred shares for which Struthers had received the certificate. It is not very material which reference be made, for whichever the antecedent was intended, the undertaking was that it "should yield an-

nually six per cent. dividends for the space of three years from and after the first day of January, A. D., 1853."

Now, dividends mean proportionate shares of the profits earned by the capital stock of a concern. When we speak of dividend paying stock we characterize the whole capital stock, and express its quality. There is no such thing as dividends of fractional parts of an entire stock. Certain stockholders of a common stock cannot be entitled to dividends in exclusion of others. Dividends occur to all or none.

When these parties therefore stipulated that the capital stock of the Rutland and Washington Railroad Company, or two hundred particular shares thereof, should "yield" (a word which implies a natural accretion from the business of the Company,) a dividend annually of six per cent., they used the common language of the day to express the value or quality of that stock, and if it proved incapable of yielding that measure of profits there was breach of the guaranty.

The position and circumstances of the parties, as well as the consideration paid, tended to confirm the conclusion to which their words conduct us.

Struthers lived in Warren county, Pennsylvania. The contract was made in New York. Clark, is said, though I see no evidence of it on the paper book to have been the President of this Vermont Railroad Company, but it is certain he was a large stockholder in it and well acquainted with it. It was a new road and had not yet acquired any general reputation with which Struthers could be supposed to be acquainted. He was selling Pennsylvania lands to Clerk. Now it was not unreasonable that he should require a guaranty of the stock of which he had so little knowledge, nor is it strange that, seeing a responsible man willing to guaranty it as a six per cent. stock for three years, he should have considered it would be capable of taking care of itself after that period. A railroad stock that would yield at that rate in the first three years of its life would be likely to grow better as it grew older.

Such, then, we infer from the circumstances of the parties as well as from their words, was the tenor of their agreement—a guaranty that the stock was of a quality to yield the specified dividend for three years. But it was not a stock of such quality; on the contrary, it is said to be worthless, or nearly so. Is then the measure of damages a matter of doubt? The rule in such cases is the difference between the value of the stock transferred and such a stock as this was guarantied to be. *Dyer v. Rich*, 1 Metcalf 192. How much more would such a stock have been worth to him than that which he got?

The defendant imagines that he may escape by paying six per cent. per annum for three years on the shares transferred, but such was not his engagement. It was likened in the argument, not inaptly, to a sale of a cow with warranty that she would produce so much milk for a given time. Nobody would doubt that such a contract would be a warranty of essential and intrinsic qualities in the cow, rather than a promise to pay the buyer the price of so much milk. So we think here. The plaintiff had a right to demand a stock that would yield, in the manner of stocks, the stipulated dividends, and failing to get it, he is entitled to damages according to the standard indicated.

The judgment is reversed and a venire de novo awarded.

LIABILITY OF SUBSCRIBERS TO RAILROAD STOCKS.

In the Supreme Court of the State of Maine, in the case of the Penobscot Railroad Company vs. White, the Court held:

Subscribers to stock of a corporation are recognized as corporators, and the shares subscribed are recognized as of stock, when the organization is completed, and the proceedings entered on the records of the Company. The records, thus made up, are *prima facie* evidence to show who are members of the corporation. When a railroad corporation sues for recovery of assessments, made for the general and legitimate purposes of the company, it is not necessary that the plaintiffs show compliance with a provision of the charter, requiring that the company shall not engage in or commence any section or sections of the railroad, until a certain percentage of the estimated cost of such section or sections is subscribed.

The power to make such assessments does not depend upon any actual existing indebtedness, nor is it defeated by any apparent indebtedness incurred under a void contract. Previous to the organization of a railroad corporation, A. subscribed for twenty-five shares of the stock, on the condition that the least sum required by the charter should be subscribed. In an action against him for his subscription, held, that it was not competent for him to show that certain of the shares subscribed for and recorded, were taken by persons pecuniarily responsible, and so reputed; but he might show by any competent testimony that the subscriptions were not made in good faith.

The shareholders or corporators should determine, in good faith, who are apparently responsible as subscribers; and the subscribers are bound thereby. The declarations of a subscriber, made long after the organization, are not admissible to prove that the corporation did not act in good faith in receiving his subscription.

☞ The annual meeting of the stockholders of the New York and New Haven Railroad took place in New Haven May 18.

The Directors in their report say:

"During the year recently closed, very little progress has been made toward effecting a final settlement of the long vexing question involved in the late fraudulent over-issue of the Company of stock. The two injunctions restraining the Company from paying dividends, which were referred to in the last annual report, have been dissolved, and the four actions then pending against the Company in the Circuit Court of the United States have been dismissed for want of jurisdiction. Three other actions, however, have been commenced against the Company, upon what are claimed to be spurious certificates of stock, which, with sundry others previously instituted, are still pending in the State Court of Appeals. The further question, which is spurious and which is genuine stock, is not yet determined; but with unabated confidence in the general accuracy of the separation of the false from the genuine stocks, heretofore made by the accountants, the Board only regret that they have thus far been unable to bring this question to a judicial test. The bill in equity instituted by the Company against all the holders of spurious certificates in order that the rights and duties of the parties respectively might be settled in one suit, and thereby the delay, expenses and vexa-

The receipts of the Illinois Central Railroad Co., from the Road for April, were:

Receipts from Passengers.....	\$80,376 94
Receipts from Freight.....	82,465 89
Receipts from Mails.....	4,686 90
Receipts from Rent of Road.....	4,015 73
Receipts from other sources.....	2,163 61

Total receipts in month of April, 1858.....	\$174,009 07
Total receipts in month of April, 1857.....	206,341 41
Total receipts since 1st of January, 1858.....	572,419 70
Total receipts corresponding period 1857.....	637,490 09

The earnings of the Michigan Central Railroad for April, were as follows:

	1858.	1857.
From Passengers.....	\$114,773 79	\$151,260 23
From Freight.....	102,236 81	139,709 72
Miscellaneous earnings.....	5,999 77	7,320 80
Total.....	\$223,010 37	\$298,299 75
Decrease.....		\$75 289 38

OFFICE OF PITTSBURG AND CONNELLSVILLE R. R. Co.,
Pittsburg, May 18, 1858. }

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connelleville Railroad Company, in the city of Pittsburg, until the **15th of June next**, inclusive, for the GRADUATION, MASONRY, BRIDGING, FRETSLING, STATION-BUILDINGS AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles, along the Monongahela River, between Pittsburg and Port Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the First Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all, the coming autumn.

By order of the Board of Directors.
me27:3w BENJ. H. LATROBE, Pres.

PAGE'S

PATENT PORTABLE CIRCULAR S-W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

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AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

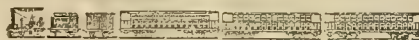
The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

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G. R. DYKEMAN, }
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

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Accommodation; the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

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Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of c. r.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

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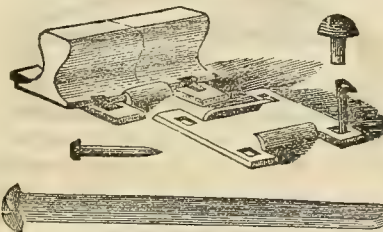
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H. C. LORD, President.

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THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad, for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even ing.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Sup't.
Racine, May 15, 1857.

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THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

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July 14, 1857.

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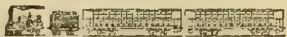
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THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

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NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Treating B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 2,000 yards masonry and 1,500 feet bridging. 44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.

W. B. MUFORD, President.

Clarksville, Tenn., May 1, 1858.

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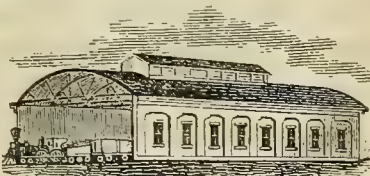
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges

We are prepared to make these structures in any quantities, at prices about as follows:
Railroad Bridges, 50 feet span, 8,400 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting. Office, No. 66 West Third street, Cincinnati, O. may13.

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DAVENPORT, RUSSELL & CO.,

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Feb. 16th

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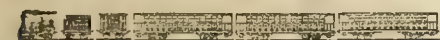
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ep10

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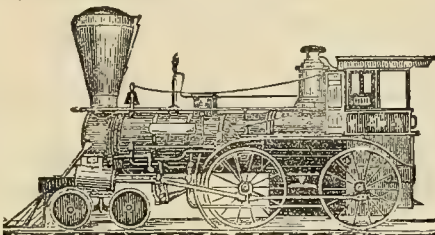
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DAYTON EXPRESS leaves at 3 45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9 15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12 30 A. M., being the

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FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

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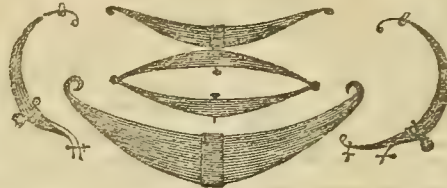
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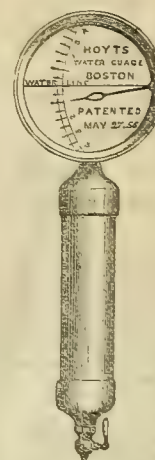
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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
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THURSDAY MORNING, JUNE 3, 1858.

Railroad Record

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GEOLOGY vs. RUMOR.

A careful investigation of the Geology of Canada, had led Sir Wm. E. Logan to the decision that there is no coal in that Province. Major Lackland, now of Mt. Auburn, had also investigated the subject, and delivered a public lecture in which he brought forward an array of facts to prove the opinion of Sir. William to be correct. Notwithstanding all this, the newspaper press, acting upon information derived from inexperienced men, recently set afloat a report that coal had been found in great abundance at a certain point in Canada. It turns out, however, that the discoverers were mistaken, and that the article is not coal, but a black, dirty slate or earthy matter, of no value as a fuel. In this case, as in all others where the science has been properly applied, the experienced Geologist comes out triumphant.

AGRICULTURE AND AGRICULTURAL PRODUCTS OF OHIO IN 1857.

As the Bread Question is the great question of society at last, we shall digest from the Report of the Commissioner of Statistics, a complete view of the agriculture of Ohio for 1857. Banks may fail, parties change, and revolutions occur, without disarranging the business and comforts of the great masses. Families will, for the most, retain their subsistence and their independence; but, this is far from being the case when bread fails. A change in crops, as in health, occasions more change in social condition, than any cause, except a change of health.

According to the Report of the Commissioner (deducing them from the facts stated), the following propositions may be laid down in reference to the great staple grains (wheat and corn) in Ohio.

1. That wheat is a *very variable* crop, subject to the attacks of many enemies, and not reliable for a *full crop* more than *one year in three*.

2. That corn is an *unfailing crop*, but liable to much variation in the amount produced.

3. That the *maximum and minimum* of the corn crop alternates with alternate years; depending chiefly on the greater or less amount of water in the *Summer season*.

4. That Drouth has done more injury, as a whole, than any one of the enemies with which grain is attacked.

These propositions will be fully proved and illustrated by the following statistics of the two great crops of the State for a series of years.

1. OF WHEAT. The following is the crop of wheat raised in Ohio for eight successive years:

In 1849.....	14,487,351 bush.
In 1850.....	31,403,000 "
In 1851.....	25,309,225 "
In 1852.....	22,962,774 "
In 1853.....	17,118,311 "
In 1854.....	11,819,110 "
In 1855.....	19,569,320 "
In 1856.....	15,333,837 "

This gives most remarkable variations. The crop of 1849 was not half that of 1850; and that of 1850 was nearly treble that of 1854! The variations in the production, *per acre*, are about in the same ratio as that of the general aggregate.

In 1850 per acre.....	17 bush.
In 1851 ".....	15 "
In 1854 ".....	8 "

The average of eight year's production per acre is *fourteen bushels*; and this may fairly be assumed, as the general average of wheat production in Ohio. Since 1854, the wheat crop of Ohio has recovered. In fact, the price of wheat got to be so high in 1856 and 1857, that farmers could afford to raise it, even at a small rate of production. There is no probability, however, that Ohio will soon obtain again the great production of 1850; or that the United States will even raise any very great surplus.

Wheat, as a grain, does not seem native to this country; but corn, oats, and rice, and potatoes, all are, and, therefore, (if this be so) it is not surprising that the native plants should excel in strength of growth. The wheat has three great enemies, besides drouth, etc. It has the winter-freezing, the summer smut, and the weevil, all to contend with; and each of these has frequently killed the whole crop, in certain localities.

As the production is variable, so is the price. In the last three years, the price of flour, at Cincinnati, has varied from \$3.70 to \$8.00 per barrel.

In a length of time, the average price of flour has been \$5.00 per barrel; which is about equivalent to \$1.00 per bushel for wheat. At that price—and an average production—wheat is a productive crop. Thus:

An Acre.....	14 bush.
At \$1.00 per bushel.....	\$14 00
Cost of cultivating.....	5 00
Seed.....	1 00
Net profit.....	8 00

This counting interest, at eight per cent., should make a well improved wheat field worth \$100 per acre. But we suppose the best wheat field of Ohio may be bought for half that.

2. OF THE CORN CROP. Corn is the real staple of the Ohio Valley, and its production increases much more rapidly, than even that of population. The following are the statistics of the corn crop of the last eight years:

In 1849.....	59,078,695 bush.
In 1850.....	56,619,608 "
In 1851.....	61,171,282 "
In 1852.....	68,165,517 "
In 1853.....	73,436,090 "
In 1854.....	52,171,551 "
In 1855.....	57,537,434 "
In 1856.....	57,802,515 "

Here we see the crop has *uniformly been less in alternate years*; the *even years* being bad crops; but, on the other hand, the aggregate of each two years has increased at a very uniform rate.

Term of 1849 and 1850.....	115,700,000 bush.
" of 1851 and 1852.....	119,300,000 "
" of 1853 and 1854.....	125,600,000 "
" of 1855 and 1856.....	145,600,000 "

Looking to the uniformity of these results; but that the last aggregate was rather large, in proportion, than in 1853, '54, we doubt whether the aggregate of 1857, '58, will be as great an increase. Indeed, if it shall come up to that of 1855, '56, we shall be surprised.

The average of these crops is about 64,000,000 bushels, which may be regarded as a fair average for Ohio.

The average, *per acre*, of the corn crop is *thirty-five bushels*. There are *counties* which have raised *sixty bushels* to an acre, and farms which have averaged an *hundred*; but, these are in remarkably good seasons and districts. They are not common cases. On the whole, the corn crop is a very profitable one; and will long remain the great staple of the Ohio Valley.

RAILROAD FRAUDS—LA CROSSE, AND MILWAUKEE—MILWAUKEE, AND SUPERIOR.

We continue to be astounded—not only with the magnitude of frauds, and peculations; but, with the audacity with which they are committed. In our paper of May 20th, we gave some account of the Wisconsin Frauds, in the case of the *La Crosse, and Milwaukee Railroad*. Since then, the Report of the Committee appointed to investigate the matter has been made—which confirms fully the first account, three-fourths of the members of the Wisconsin Legislature of 1856, were bribed—openly bribed!! For what else was it—when those who voted for the Bill received from \$10,000, to \$20,000 each. Byron Kilbourne, (President of the Company,) swore that, he did not give these Bonds with “a corrupt intent”—but, “to propitiate the feelings” of the members, &c.!! It is rather unfortunate for his theory,—that the members who voted *against* the Company got none of the spoil! Why should not they be propitiated also?

We see it stated, that the principal agent, in this villainy, is a member of the present Legislature—and that the Senate and his constituents have both voted him a scoundrel, but, he won't resign! Why should he? He may safely brave the scorn of the world for the residue of his life. What more can he do, to be ashamed of?

Since that, we hear of another tremendous swindle of the “*Milwaukee, and Superior Railroad*” Company. It seems, that the Directory of this Company first issued \$100,000 of Stock, which was divided among the Directors—but upon which nothing was paid. They then sent out agents to get subscriptions, in *mortgages*, which many of the innocent people were unsuspecting enough to give. In this way, they got \$205,000. Stock was issued for \$120,000, called “Cash subscribers.” In all \$525,000, were issued in Stock and Bonds, without a single dollar being paid thereon! The Company made a pretence of commencing the road—and after working on four, or five miles, utterly failed. In the meantime, the Directors *sold* the *mortgages*, and now the poor farmers are left to be pitilessly sacrificed!

If, there is to be any more criminal justice on earth—it is time—it was executed. We can not go on much longer this way. We must put a stop to all credit, and all faith in man—or, we must punish the scoundrels, who thus abuse public confidence. It is most unfortunate, that the fame, and credit of good roads, and companies should be made to suffer, as they must, from these villainies.

The *Cincinnati Gazette* well says:—

Now what is this but robbery of the worst kind? A midnight assassin, or a highwayman, is not more wicked, depraved, or dishonorable, than the rascals who contrived to take from several hundred honest farmers of Wisconsin, their property. And yet while the former are punished, the latter are permitted to go free. If the perjured legislators and all the railroad villains of Wisconsin, great and small, could be sent to the Penitentiary we might hope for a cessation of the demoralizing transactions, such as have disgraced, not only Wisconsin, but a very large proportion of all the States of this

Union. The frauds that have been discovered in the United States within the last twelve months, are calculated to destroy public confidence, and to disgrace the American nation. The railroad interests of the country are now suffering the consequences of the dishonest policy that has been adopted by the managers of a majority of those corporations. The good have been dragged down with the bad, and it will require years of hard labor and honest management, to restore railroad property, that has an inherent value, to the position that it should occupy in the market.

A GOOD SPECULATION—SLEEPING CARS.—A car, fitted up expressly for sleeping, has been put upon the Little Miami road. It is furnished with comfortable berths, (into which the seats are converted,) and apartments temporarily constructed, like the state rooms of a steamer, with accommodations for four. The charge for a berth is fifty cents per night, and the attendant informed a friend yesterday morning that he had taken the night previous thirty dollars for lodgings! The owner of the car furnishes it gratis to the Railroad Company, and gets his pay from the sleepy passengers at fifty cents per head.

The *Cincinnati Gazette* on the above refers in very deserved terms to Woodruff's Patent. These cars cost but little more than the common ones, are equally good day cars with any others now in use, and are certainly a great desideratum for night travelers.

E. F. Fuller has resigned the position of General Ticket Agent of the Little Miami Railroad Company, preparatory to entering the service of the Baltimore and Ohio Railroad Company. P. W. Strader, Esq., has taken charge of the office vacated by Mr. Fuller. He still retains his connection with the Ohio and Mississippi Company. The Union Railroad ticket office in this city has been abolished.

THE MOBILE AND OHIO RAILROAD.

The prospect of an early completion of the northern portion of the Mobile and Ohio Railroad is very encouraging. The terminus which will be ultimately adopted, is Cairo; but the town of Columbus, about twenty miles below that place, will be the present point at which the road will strike the Mississippi River. From thence to Jackson, Tenn., a distance of eighty-seven miles. Gangs of men are at work laying the track with all possible despatch. Mr. J. J. Williams, the Chief Engineer of the division, informs us, that provided no unexpected delay occurs, trains will be prepared to connect with river steamers at Columbus within three months.

The Mobile and Ohio Road is destined to assume an important position. It is the first link yet constructed which connects the northern and southern system of railroads of the western part of the United States, and will form the avenue over which Illinois and Alabama, and their sister States will exchange their productions. Besides this, when the line is finished, the passenger travel from the east to the south-west will take its course through Ohio, Indiana, Illinois, and thence,

with but twenty miles steamboating, (between Cairo and Columbus) to Mobile. The total length will be 473 miles, and to judge by that portion which has already been opened, and in use for 232 miles north of Mobile, the whole will realize the expectations of the Stockholders. The President of the Company, is Hon. Milton Brown, of Tenn.

☞ The Annual Report of the Pacific Steamship Company has been made. The statement of the condition of the Company shows a surplus of \$423,246 on the 1st inst., out of which a dividend of 10 per cent. has since been declared. The Company own thirteen steamers, ten of which are actively employed.

A contract for mail service between San Francisco, and Puget Sound, *via* intermediate ports, was made with the United States for four years, beginning in October, 1857, at \$122,500 per annum. This extends their line of operation, and employs additional tonnage.

The steamships have been reduced in valuation over \$800,000, and the real estate over \$200,000, although a valuable wharf has been purchased during the year. The reserve fund shows an increase of \$109,000, and the Company's stock on hand \$121,000.

MILWAUKEE AND MISSISSIPPI RAILROAD.

On the 26th inst., the following persons were elected Directors of the Milwaukee and La Crosse Railroad Co.:

N. P. Stanton, Artemas Fish, Jacob H. Shear, William Watson, Eli Perry, G. W. Luther, D. V. N. Radcliff, W. E. Smith, John P. McGregor.

This ticket was supported by the Eastern Stockholders. Mr. Gould, of Albany, voted proxies to the amount of 35,162 shares.

The Western stockholders having been defeated at the election for directors, appointed a Vigilance Committee to watch over their interests, and to act with or against the new Board as circumstances may warrant.

Byron Kilbourn, late President, obtained a hearing at the Stockholders meeting, and justified himself on the principle that the “end sanctified the deed.” The following is an extract from his speech:

“It is said that we endeavored to stop the investigation in '56 and '57. Undoubtedly we did; and had we permitted the investigation to have gone on in 1856, the road would have been killed, dead as a herring. We were then negotiating the sale of bonds of the road at 80 cents on the dollar, and at that rate sold \$1,250,000. The investigation would have stopped that, and probably the Legislature would have repealed the land grant. During the investigation, the bonds fell from 50 to 30. This investigation has cost the Company more than all the farm bonds amount to—over a million of dollars. We should never have reached Portage city had it taken place sooner.”

Railroads.

LITTLE MIAMI RAILROAD.

We are indebted to the officers of this Company for a copy of its Fifteenth Annual Report. This document also comprises the Eighth Annual Report of the Columbus and Xenia Railroad, and is the Second Joint Report of the two companies. It is one of great interest as being a plain and simple statement of a well managed railroad company during a financial year of extraordinary interest.

The President's Report says:

It would have been much more agreeable to us to have been able to have advised you of an increased amount of receipts over the business of the previous year, which, at the date of our last Annual Report, we felt authorized to anticipate, but as you will learn from the Treasurers' exhibits, our entire income for the past year has been \$46,437 91 less than that received in 1856.

Unexpected as was this diminished revenue, in the early part of the season—our receipts for the first six months of the year having considerably exceeded those of the corresponding months of the previous year—we yet feel that we have reason to congratulate you upon the large amount of earnings for the entire year, and the prosperous condition of our companies, in view of the causes that have operated to lessen our revenues, which have, in part or whole, affected in a much greater degree most of the other leading railroads, as they have all the business departments of the country.

These causes principally, as you are aware, grew out of the continued and unusual navigable condition of the Ohio river during nearly all the year, that diverted from the railroads large amounts of freight which would otherwise, to a considerable extent, have passed over our roads; the competition, consequent in part, of the river transportation, between the various roads for the residue of the freights, that led to the adoption of rates of transportation considerably below the point of fair remuneration; the comparatively small amount of shipments to the eastern markets of all kinds of property furnished by the west; and the sudden and almost overwhelming commercial disasters of the country, that for a time seemed to paralyze every department of business, unsettled all property values, diffused universal distrust, and from the withering effects of which, the country has not yet fully recovered.

A combination of such unfavorable circumstances upon our railroad interests can hardly be expected soon to recur, and in the absence of either of them, we can not doubt the business of our roads will show a steady increase of receipts, while the expenses, in any contingency, will be reduced to the lowest point

of a permanently economical administration of the companies affairs.

In March last, our Little Miami Company, with the concurrence of our Columbus and Xenia Company, concluded a contract with the Marietta and Cincinnati, and Hillsborough and Cincinnati Railroad Companies, by the terms of which, among other things, in consideration of the use in common with us, of the Little Miami tracks between Loveland and Cincinnati, and of our Cincinnati passenger depot, the M. & C. and H. & C. companies agreed to pay us—the Little Miami—\$60,000 per annum, in monthly installments of \$5,000, and to share with us the expense of repairing, etc., the road, and protecting the property used in common between us, in proportion to the number of miles run on the road by their engines and cars; either party to have the right of terminating the contract after two years from the time it went into operation—June 1st, 1857—by giving two years' written notice of their desire for its termination.

To aid the Steubenville and Indiana Railroad Company to perfect their connections between Columbus and Pittsburgh, our Columbus and Xenia Company, with the assent of the Little Miami Company, in May last, loaned their credit to that company to the amount of twenty thousand dollars.

During the past year, the whole floating debt of the Little Miami Company has been paid, amounting to \$169,108 93, and \$55,000 of Columbus and Xenia bonds, originally issued to the Central Ohio Company and falling due Feb. 1st, 1857, were paid on that day—the remaining \$5,000 of the original issue having been previously paid.

Little has occurred in connection with our roads during the past year, except as above referred to, of an unusual or especial interest. Our trains have been run with their accustomed regularity and freedom from accident. No serious loss has happened to any of the large amounts of property carried over the line, and no injury of any kind has been sustained by any passenger on account of the condition of the track, the character of the equipment, or the management of the trains.

A more than ordinary amount of renewals, both of the track and ties, has been made during the year. About 1774 tons of rails, chiefly re-rolled, have been re-laid, and about 20,000 ties have been replaced. An additional quantity of each will be required during the coming year. We have added also to our side tracks wherever needed.

Our station buildings for water and other purposes have been much improved. New structures have been erected at several points, and little additional outlay for station facilities on any part of the road will be required for many years.

The roads, with all of their appurtenances, are in good condition. The rolling stock is

of the best character, and of sufficient quantity, with some additions, for the largest business we can reasonably expect during the ensuing year.

The prominence of our roads as a part of the great railway lines between Cincinnati and the East, the West and the South, is fully maintained. Indeed, their importance in these respects increases with every year. Our valuable connections at either terminus of our respective roads, and the steadily growing business of these leading tributaries, must continually add to the value of our line, and permanently secure it an eminent position in the railroad system of the country.

Our relations with all of our connecting companies are of the most harmonious and satisfactory character. The mutuality of our interests, and the liberal policy uniformly observed in all matters relating to our business concerns, give assurance of the most friendly intercourse being continued between us.

Our accomplished Superintendent, Wm. H. Clement, Esq., after faithfully discharging the duties of that office upon our roads from the date of their union, resigned the office in June last, for the purpose of taking charge of the Ohio and Mississippi Railroad. Your Directors appointed, as his successor, John Durand, Esq., the present incumbent, who brings to the service of our companies a large experience in the management of railroads. To him, and our other officers, agents and employees, we take pleasure in expressing our satisfaction for the manner in which they have performed their respective duties.

The statement of the Treasurer is:

The earnings of the road are as follows, viz:

Passenger receipts.....	\$530,901 36
Freight do	588,121 93
Express and Mail do	44,139 20
	<hr/> \$1,163,162 59

The expenditures for the road have been...	664,415 10
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Leaving the net earnings of the road....	\$498,747 49
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Besides this there has been received from Dividends on Col. & Xenia Stock.....	48,104 50
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	<hr/> \$546,851 99
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And there has been paid out—	
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On Interest Account.....	\$92,511 19
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" previous year's business..	19,159 47
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	<hr/> 111,670 66
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Leaving the Net Profits of the Joint Company.....	\$435,181 33
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Of which	
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The Little Miami Co. owns two-thirds...	\$290,120 89
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The Col. and Xenia Co. owns one-third.	145,060 44
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The Assets of the Little Miami Company are:

Construction.....	\$2,760,796 51
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Real Estate and Depots.....	588,629 06
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Bills receivable.....	938 84
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Columbus and Xenia Railroad	
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Stock.....	425,650 00
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Hillsboro' and Cincinnati R.	
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R. Stock.....	9,262 83
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Springfield, Mt. Vernon and	
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Pittsburg do.....	4,000 00
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Sundry Stock.....	6,130 41
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Individual accounts.....	25,971 40
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L. M. & C. & X. R. R. Co.....	750,171 38
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	<hr/> \$4,571,580 43
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The Liabilities are:

Capital Stock.....	\$2,981,293 12
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Loan from City of Cincinnati.....	100,000 00
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" of 1848, in Bonds.....	138,000 00
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" 1851.....	7,600 00
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" 1853.....	981,000 00
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Dividends unpaid.....	43,058 63
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Profit and Loss.....	320,328 66
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	<hr/> \$4,571,580 43
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The Account with the Stockholders stands thus ;
 Surplus, Dec. 1, 1856.....\$479,235 24
 L. M. Co.'s proportion of Pro-
 fits of Joint Co. for year 1857. 290,120 89
 Amount transferred from "De-
 precia't'n and Renewal Fund" 80,000 00
\$849,356 13

From which deduct:

Dividend No. 21, declared Dec.,
 1856.....\$149,064 13
 Dividend No. 22, declared June,
 1857.....149,064 13
 Springfield, Mt. Vernon & Pitts-
 burg R. R. Stock, charged up. 196,150 00
 Hills, & Cin. R. R. Stock, charg-
 ed up.....1,444 72
 Lake Steamers, charged up.....32,630 40
 Sundry Expenses and Losses... 674 09
\$129,027 47

Surplus Dec. 1, 1857.....\$520,326 66

The entire cost of the Road, and our
 proportion of the Equipment, amounts to
\$3,925,157 30.

The officers of the Company for the year,
 are :

John Kilgour,* *President* ; D. G. A. Dav-
 enport, *Treasurer* ; Chas. H. Kilgour, *Secre-
 tary* ; John Durand, *Superintendent*.

DIRECTORS.

Jacob Strader, John Kilgour, Griffin Tay-
 lor, R. R. Springer, John H. Groesbeck,
 Nathaniel Wright, John Bacon, Abraham
 Hivling, James Hicks, Jr., Larz Anderson,
 Alphonso Taft, Chas. H. Kilgour.

The Officers and Directors of the Colum-
 bus and Xenia Railroad Co. for 1858, are :

Wm. Dennison, Jr., *President* ; John Dur-
 and, *Superintendent* ; Cyrus Fay, *Secretary and
 Treasurer*.

DIRECTORS.

Wm. Dennison, Jr., Robert Neil, Alfred
 Kelley, D. W. Deshler, P. Hayden, L. Good-
 ale, Wm. B. Durand, Joseph R. Swan, Col-
 umbus ; Jacob Strader, John Kilgour, R. R.
 Springer, Cincinnati ; Abraham Hivling, of
 Xenia.

RAILROAD TO THE PACIFIC.

The world is beginning to wake up to the
 importance of a railroad to the Pacific, and if
Young America, with all his enterprise, don't
 look out, that old foggy, *John Bull*, will yet
 beat him. The argument as to the advan-
 tages to the British possessions, as set forth in
 the following article from the *Liverpool Al-
 bion*, is fully quadrupled when applied to our
 own country.

A new and most unexpected solution of the
 great geographical and the not less great po-
 litical problem of interoceanic communication
 between the Atlantic and Pacific, is about to
 be furnished, and in a way that shall obviate
 a repetition of Clayton-Bulwer embroilments,
 while rendering impossible the objections that
 surround the various Central American trans-
 its, whether Panama, Atrato, Nicaragua,
 Honduras, Tehautepec, or others, on the
 score of disturbances inseparable from the
 Spanish American republics. The proposed
 route is entirely British; through exclusively
 British Territory; would consequently be
 solely under British control, and in no way

impinge upon the soil of foreigners, or evoke
 diplomatic complications, such as are una-
 voidable in all other schemes for the attain-
 ment of the same end.

The decision of the Government with re-
 ference to the Hudson's Bay Territory, and
 the certainty of the annexation of the most
 desirable portions to Canada at no distant
 date, have revived with redoubled interest
 the often contemplated project of a railway
 from the Atlantic to the Pacific. The Gov-
 ernment of the United States long ago sur-
 veyed a projected line from Chicago to Puget
 Sound; but the plan which now engages the
 attention of the Canadians is for a railway
 entirely through British territory in connec-
 tion with the Grand Trunk and St. Andrew
 and Quebec lines. It has been maturely
 considered by Mr. Forsyth and others, who
 have prepared petitions on the subject, to be
 presented to the Canadian, New Brunswick,
 and Imperial Legislature. As only 200 miles
 of railway require to be made between Riv-
 iere du Loup and Woodstock, it is proposed
 that the Provinces of Canada and New
 Brunswick should undertake the completion
 of that link, without asking any aid from the
 Imperial Government or Legislatures. It is
 calculated that the cost of construction will
 not exceed £50,000 annually until completed,
 which should be raised on their several secu-
 rities at six per cent. An unbroken line hav-
 ing been made from the Atlantic to the south-
 ern extremity of Lake Huron, at the expense
 of the provinces, it is thought that the Im-
 perial Government may then fairly be applied
 to for aid in carrying the line westward to
 the Pacific. The Grand Trunk line termi-
 nates at Sarnia, but, in order to confine the
 projected line entirely to British territory, it
 will diverge therefrom at Belleville, and run
 north-westerly until Lake Superior is turned,
 when it will follow the boundary between the
 United States and the territories of the Hud-
 son's Bay Company to the shores of the strait
 which separates Vancouver's Island from the
 mainland. The financial portion of the scheme
 involves a guarantee from the Imperial Gov-
 ernment of a minimum of six per cent. on
 some twelve or fifteen millions, and the grant
 of the land required, as was done by the Gov-
 ernment of the United States in the case of
 the Illinois railway.

The calculations of the promoters of this
 great idea as to the profits to be realised are
 founded upon the increase of traffic westward,
 and the anticipated diversion of that which
 now follows the Suez and Cape routes to
 India and China. The subsidies paid to
 the Cunard and the Peninsular and Oriental
 steam lines are over £350,000 per annum,
 which sum almost represents the interest of
 the maximum amount estimated to be requir-
 ed for the construction of the whole line, a
 distance of about 1,500 miles, as the crow
 flies, and of about 2,000 by the railway route.
 The great importance and desirability of a
 means of communication which would bring
 India and China within sixteen days of Eng-
 land, are too obvious to require enlarging
 upon. Passengers, treasure, and the lighter
 and more valuable merchandise would at
 once seek the shortest route, and the long-
 sought desideratum of a north-west passage
 to the East Indies, which has occupied the
 minds of geographers and navigators for cen-
 turies, would at last be realised, though not
 in the manner anticipated by our ancestors.
 Of the feasibility of the project there can be
 no doubt; it is much less startling, than five
 years ago, was the idea of Canada construct-

ing 1,000 miles of railway from her own re-
 sources. Contractors will readily be found
 to undertake the works, if the Imperial Gov-
 ernment will guarantee half a million annu-
 ally during their progress and grant the land.
 The policy of such course cannot be doubted,
 when considered with reference to the impor-
 tance of speedy communication with our
 possessions in the East, and the advantages
 which would accrue to our commerce from
 the opening of a route through British terri-
 tory by which goods could be sent from the
 Atlantic to the Pacific, and *vice versa*, without
 break of gauge or bulk.

The facilities which the projected railway
 will afford for the colonization of the vast re-
 gion it will traverse, will not be among the
 least of its claims to the support of the State.
 Skirting the rich mineral district north of
 Lake Superior, it will serve to convey the
 ore to Kingston and Montreal and do more
 in a few years to develop the metalliferous
 wealth of that region than could be accom-
 plished without it in a century. Westward
 of Superior commences the valley watered by
 the chain of lakes which connects that inland
 sea with Lake Winnipeg, and which Mr.
 Hind's report of his recent exploration shows
 to offer many spots eligible for settlement.
 Such are the valley of Rainy river, estimated
 to contain 220,000 acres of good land, the
 islands in the Lake of the Woods, and sev-
 eral patches, varying in extent from 50 to 300
 acres, in the valley of the Winnipeg. Of the
 valley of the Red river, Mr. Hind speaks in
 terms of the warmest admiration. The cli-
 mate is well adapted for agricultural opera-
 tions, the summer temperature being nearly
 four degrees milder than at Toronto, as ascer-
 tained by comparison of corresponding obser-
 vations. All kinds of corn and vegetables
 succeed as well as in Canada, and also flax,
 hemp, and hops. Limestone and clay are
 abundant, and great facilities are thereby
 presented for building. Towards this exten-
 sive and fertile region a large colonizing
 movement is sure to take place as soon as
 the railway has rendered it accessible. Scarcely,
 if at all, inferior to this region in fertility is
 the valley of the Saskatchewan, where also
 the railway will pass over the broadest part
 of the most extensive coal field in all the
 British dominions. In approaching its west-
 ern termination, opposite Vancouver's Island,
 it will traverse the most eligible portions of
 the Hudson's Bay Company's territories west-
 ward of the Rocky Mountains, coal being
 found along the coast, and gold in Thomp-
 son's river, while the fertility of the whole
 district is at least equal to that of Vancou-
 ver's Island. The opening of such a vast area
 of cultivable land to settlement will, of itself,
 afford a branch of traffic which will augment
 every year; but the Atlantic and Pacific rail-
 way will not have to wait for the peopling of
 the wilderness to obtain passengers and
 freight, the advantages of the route as a means
 of communication with India and China being
 so obvious and great that a large proportion
 of the traffic can not fail to be diverted from
 the Suez and Cape routes as soon as this
 great interoceanic highway is completed.
 The advantages of such a result to the share-
 holders of the Grand Trunk Company will be
 immense, for whenever the Pacific line shall
 become *un fait accompli* the 11½ per cent.
 dividend promised them in the prospectus will
 become so likewise, as all the traffic passing
 over the latter must necessarily pass over the
 Grand Trunk also.

* Since deceased.

For the following statement of the earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Co., for the month of April, we are indebted to Mr. Joseph K. Edgerton, Vice President of the Company.

ACCOUNTING DEPARTMENT OF THE PITTSBURG, FORT WAYNE AND CHICAGO R. R. CO.

AUDITOR'S OFFICE,
PITTSBURG, May 11, 1858.

The earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Company during the month of April, were as follows, viz:

From Freight.....	\$56,834 49
" Passengers.....	69,908 78
" Mails.....	4,482 39
" Rent of Road.....	5,500 00
" Miscellaneous.....	244 67
Total.....	\$137,060 23
Earnings for same month last year.....	162,742 50

Decrease (15 8-10 per cent.).....	\$25,682 27
The expenses in April were as follows, viz:	
Station Expenses.....	\$ 7,674 17
Cost of Running.....	19,087 06
General Expenses.....	9,266 63
Repairs of Machinery.....	13,855 01
" Track and Railway.....	20,974 60
" Structures.....	1,643 07
Total.....	\$73,740 54
Expenses in same month last year.....	77,704 28

Decrease (5 3-10 per cent.).....	\$ 3,963 74
Net Earnings in April, 1857.....	\$25,038 22
" " 1858.....	63 319 69

Decrease in net earnings.....\$21,718 53

T. D. MESSLER, Auditor.

Fl. Wayne Republican.

RAILROAD BRIDGES.

The following article from the Baltimore American, relative to Railroad Bridges, so well accords with our views, as to the proper material of which railroad bridges should be built, that we give it entire. We are well aware of the difficulties in the way of always putting up these kinds of structures at the beginning of our railroad enterprises, on account of their limited means. The increase of expenditure, however, is not necessarily so great as might at first be supposed. Iron bridges can be built for but a trifle more than the temporary wooden structures that are now, erected and should in all cases be adopted.

One of the most fruitful sources of accident on American railroads, arises from insecure bridges. On English railroads accidents from such causes are seldom known. From January 1, 1851, to January 1, 1858, there was not a single accident of that kind in Great Britain, although bridges are proportionately more frequent than with us. This is entirely due to the comparative solidity of such structures. English bridges are almost universally of stone or iron, whilst in this country, on many of our most important roads, the bridges are almost exclusively of wood. The Railroad Journal states that on "the New York Central, of 323 bridges, of all lengths, two are of iron and one of stone; the rest are wood. On the Erie Road there are 196 bridges, of which three are stone, and the rest of wood. On the Baltimore and Ohio Road there are 288 bridges, of which eighteen are iron, 78 are stone, and the rest chiefly wood." The Journal is in error in regard to the Baltimore and Ohio Road, and the true statement renders the comparison between it and the two other roads mentioned still more favorable on this important point of bridge

safely. The total number of bridges on the main stem of the Baltimore and Ohio Road is 235, of which three are over the roadway. Of this total 22 are iron bridges, 80 stone, 55 wood and iron, and 74 wood. These figures exhibit a striking difference in the expense and care which these three great East and West roads have expended upon their bridge structures. Of the 519 bridges on the New York Central and the New York and Erie Roads but two are of iron, whilst the Baltimore and Ohio alone has 22; the Central and Erie have conjointly only four stone bridges; the Baltimore road alone has 80 bridges built of the best and most lasting material. If we throw these figures into a tabular form, the comparison is strikingly presented:

	Total	Br's.	Iron.	Stone.	Wood & Iron.	Wood.
Balt. & Ohio.....	2235	22	80	55	78	
N. Y. Cent.....	323	2	1	—	320	
N. Y. & Erie.....	196	—	3	—	193	

On the Parkersburg branch of the Baltimore and Ohio road there are 49 bridges, all of wood and iron, and of new and approved construction. On the Washington branch there is but one bridge of any length, and that, the viaduct over the Patapsco, is the most magnificent and substantial stone railroad bridge in the Union.

SOUTHERN MINNESOTA R. R.—ELECTION OF DIRECTORS AND OFFICERS.

The people of Minnesota having ratified the "Five Million Railroad Loan Bill," by a large majority, arrangements are being made for prompt and vigorous action on the part of the managers of the great Southern Minnesota Railroad, which is virtually a western extension of the La Crosse and Milwaukee Railroad. This line lies in the valley of Root River, and commences at La Crosse nearly opposite La Crosse, and continues in a very direct route west through an exceedingly fertile, well settled district.

By means of the Chicago, Fond du Lac & St. Paul Railroad, and the La Crosse and Milwaukee Railroad, and the early construction of the Northern Land Grant Road from St. Paul, connecting with the La Crosse and Milwaukee Railroad in or near Monroe county, Wisconsin, the trade of Northwestern Wisconsin, and northern Minnesota will be conducted to the Lake Michigan ports. Thus Chicago and Milwaukee will draw from northern and southern Minnesota a large traffic that has never yet been developed, but which will soon come into the avenues and channels of commerce. It should be borne in mind that the vast crowd of people who have for years past been pouring into the northwest, and have been "consumers," are now occupying the position of "producers," and the products of the west must be exchanged for eastern manufactures, and articles of common necessity that are elsewhere raised.

The La Crosse Road, in connection with the Root River Railroad, secures the trade of Southern Minnesota, and an important portion of western Wisconsin. The St. Paul or Land Grant branch of the La Crosse and Milwaukee Railroad will absorb the northern trade and travel which would otherwise pass up and down the Mississippi.

At the meeting of the Root River Valley or Southern Minnesota Railroad Co., on the 12th April, the following persons were elected Directors:

Selah Chamberlin, Cleveland, Ohio; A. G. Chatfield, Belle Prairie, Min.; F. H. Goodrich, Milwaukee, Wis.; W. L. Hellfenstein,

Philadelphia, Pa.; J. A. Hellfenstein, Milwaukee, Wis.; N. F. Howes, St. Peter, Min.; Moses Kneeland, Milwaukee, Wis.; B. Pringle, Batavia, N. Y.; H. L. Palmer, Milwaukee, Wis.; N. H. Pratt, La Crescent, Min.; B. F. Pratt, St. Peter, Min.; George E. Skinner, Faribault, Min.; H. H. Sibley, Mendota, Min.; C. W. Thompson, Hokah, Min.; D. J. Whittemore, La Crescent, Min.; Henry T. Wells, Minneapolis, Min.; Daniel Wells, Jr., Milwaukee, Wisconsin.

The following gentlemen were elected officers:

Daniel Wells, Jr., President; B. Pringle, Vice President; Selah Chamberlin, Treasurer; N. H. Pratt, Secretary; H. L. Palmer, Attorney and Land Commissioner; D. J. Whittemore, Chief Engineer.—Chicago Daily Press.

PEORIA AND HANNIBAL RAILROAD.

The annual meeting of the stockholders of the Peoria and Hannibal Railroad Company, was held at Vermont on the 13th inst. The following extract from the Report of the Engineer, will show the progress of the work:

"On the 1st day of January, 1857, the undersigned commenced service for your Company as Chief Engineer, since which time your road has been located from Peoria to Rushville, a distance of seventy-five miles, and the same put under contract.

The amount of work done under contract is as follows:

IN PEORIA COUNTY.

Clearing and Grubbing.....	\$ 3,377 50
Grading.....	18,019 72
Bridging.....	6,181 76
Cross Ties.....	741 60
Total.....	\$28,320 58

IN FULTON COUNTY.

Clearing and Grubbing.....	\$1,750 00
Grading.....	5,940 00
Bridging.....	1,969 08
Total.....	\$9,659 08

Total.....\$37,979 58

Making a total of \$37,976 58, on which the monthly estimates have been promptly paid as they became due. There is now finished and nearly ready for the superstructure, about eight miles of road bed in Peoria county, and five miles in Fulton county. Your work is in a prosperous condition, and with continued persevering industry, your road can be completed at no distant day."

The election for Directors resulted in the choice of the following named gentlemen by nearly a unanimous vote:

Isaac Underhill, Joseph Ladd, Peoria; Nathan Beadles, John H. Piersol, Lewistown; William K. Johnson, Vermont; Lewis D. Erwin, Rushville; J. F. Hawkins, Hannibal.

At a subsequent meeting of the Board of Directors, the officers elected were as follows:

Isaac Underhill, President; Wm. K. Johnson, Vice President; W. G. Wheaton, General Superintendent; A. M. Johnson, Secretary; John H. Piersol, Treasurer; W. G. Wheaton, Chief Engineer.

The Milwaukee and Mississippi Railroad Company have made an arrangement with the Chicago and Galena Railroad Co., by which freight can go from Galena to Milwaukee, without breaking bulk. The connection is made west of Janesville, so that that city is greatly benefited by the connection made.

REPORT OF THE PHILADELPHIA BOARD OF TRADE.

We copy from the *Pennsylvanian* of May 27, the following remarks relative to and extracts from the Report of the Philadelphia Board of Trade:

The report for 1858, by the Committee on Inland Transportation, of the Philadelphia Board of Trade, contains a collection of statistics in reference to the commerce of the Lakes and the Canadas, gathered from the Canadian Directory, the Canadian Almanac for 1857, and one or two other sources mentioned. The argumentative part of the report is but a repetition of the report of May, 1856, which document sets forth with great clearness and perspicuity the advantages to be derived by this city and the State of Pennsylvania from the immense and constantly growing commerce of Canada and the Lakes, and the necessity of connecting this port with that of Sodus-bay, on Lake Ontario, as the shortest and most direct route. We have repeatedly explained in the columns of the *Pennsylvanian* of what vital importance this scheme of a connection of Philadelphia with Sodus-bay is. The south-eastern portion of Lake Ontario is the natural eastern terminus of the trade of the entire Lake region. Those harbors of Lake Ontario which are nearest the great Atlantic harbors, must ultimately attract that trade, for the simple reason that Lake transport is considerably cheaper than railroad or canal transport. This fact was, years ago, practically recognised by New York, and the results of her connections with Oswego, which of the harbors of Ontario is the nearest to New York, are such as to urge us to spare no effort to imitate her example. Sodus-bay harbor is not farther from Philadelphia than Oswego is from New York, while only thirty-five miles of railroad are required to put us in communication with it. Since it is of the utmost consequence that with the impending revival of business this idea should be acted upon, we would again call the attention of our readers to the startling effect of the connection of New York with the port of Oswego. No sooner was this route opened than the trade of Oswego gained in a single year (1855) 70 per cent., whilst that of Buffalo, formerly the principal Lake depot of New York, was affected in the opposite way.

The Board of Trade report remarks in reference to this movement:

"Passing now to the comparative figures for 1855 and 1856, it will be found that the whole trade of Buffalo, for the first time, declined prodigiously in the latter year. Although the grain trade of the city increased about one per cent., the receipts of pork by the Lakes fell off 46,000 barrels (55 per cent.); those of beef 64,000 barrels (65 per cent.); bacon, 1,548,000 pounds (7 per cent.); lard, 5,000,000 pounds (50 per cent.); tallow, 600,000 pounds (50 per cent.); wool, 1,000,000 pounds (12 per cent.); butter, 727,000 pounds (67 per cent.); lead, 37,000 pigs (58 per cent.); pelts, 1000 bundles (25 per cent.); seeds, 5230 barrels (25 per cent.), etc.

"The total lake imports of Buffalo, including grain, declined from \$48,767,315 to \$40,429,871, about 10 per cent., which, as the corn crop of Ohio and the wheat crop of western Canada tended vastly to raise the average, shows an unprecedented and ruinous decline in the commerce of that port, so far as relates to the great West."

The imports of Buffalo from the East declined in a similar manner, as the following estimates in the Board of Trade report will show:

"We find that of salt, the greatest product of New York State, the receipts by canal at Buffalo fell off in the year 1856, from 1855—48,400,000 pounds—47 per cent.

Lumber.....	5,150,000	62 per cent.
Hides.....	272,000 lbs.	37 1/2 "
Leather.....	323,000 "	37 1/2 "
Pig Iron.....	3,250,000 "	15 "
Iron and Steel.....	7,400,000 "	37 "
Sugar.....	16,068,000 "	53 "
Molasses.....	4,050,000 "	25 "
Coffee.....	3,820,000 "	33 "
Merchandise.....	31,400,000 "	30 "
Sundries.....	11,800,000 "	50 "

"Owing to the increase of coal (from the Shamokin region,) the whole tonnage fell off by canal inward less than might be expected, the deficiency, at the Collector's valuation, being \$15,758,000—80 per cent."

Meanwhile the trade of Oswego made astonishing progress, as will be seen from the following extract from the report:

"We find that the receipts of wheat at Oswego, in 1856, as compared with 1855, increased 3,017,000 bushels (60 per cent.); corn, 728,000 bushels (28 per cent.); other grain averaging about the same, and showing an aggregate increase of 3,700,000 bushels over the receipts of 1855.

"The total trade of Oswego increased \$6,612,000, or about 15 per cent. over its trade in 1855. Its trade with Canada, in 1856 amounted to \$14,969,000, being about 22 per cent. over that of 1855, and 150 per cent. over that of 1854.

"The exports of Oswego, by canal southward, also sustain the figures of the lake commerce. The shipment of grain in 1856 increased 4,000,000 bushels—75 per cent. over those of 1855:

Beef.....	500 barrels,	61 per cent.
Pork.....	24,300 "	500 "
Bacon.....	2,460,000 pounds,	145 "
Lard.....	160,000 "	10 "
Hides.....	166,670 "	500 "
Leather.....	105,800 "	475 "
Oil Cake.....	2,920,000 "	65 "
Lumber.....	5,000,000 feet	7 "
Hay.....	3,000 bales	16 "

"The total tonnage cleared by canal in 1856, increased 140,000 tons, or 40 per cent. over that of 1855.

"The receipts by canal at Oswego indicate an equal increase in the return commerce westward of the merchandise and manufactured articles of the Eastern States:

Leather increased.....	288,000 lbs.	1100 per cent
Furniture.....	1,016,000 "	900 "
Pig Iron.....	12,000,000 "	375 "
Castings.....	7,100,000 "	180 "
Domestic salt.....	34,886,000 "	22 "
Sugar.....	8,290,000 "	63 "
Molasses.....	1,423,000 "	40 "
Coffee.....	2,600,000 "	108 "
Nails, spikes, etc.....	1,423,000 "	80 "
Iron, steel.....	8,339,000 "	180 "
Crockery, etc.....	2,393,000 "	220 "
Mineral coal.....	36,670,000 "	60 "
Sundries.....	4,533,000 "	100 "

"The total tonnage inward to Oswego, of the canal, shows an aggregate increase of 44,100 tons—about 22 per cent."

These figures demonstrate conclusively the importance of the southeastern harbors of Lake Ontario, and the superiority as depots for the Atlantic ports. If Philadelphia would participate in the lucrative Lake and Canadian trade, and share with New York its rich profits, she must hasten to contract a terminus from the northernmost point of the Elmira railroad to Sodus-bay, which would bring her in direct communication with that excellent harbor, bestowing upon her all the advantages New York has derived from her connection with Oswego. The whole secret of the com-

mercial ascendancy of New York lies in her superior connection with the Lakes, which pour into her lap the valuable staples of the West and Canada, that attract the vessels of foreign countries, thus making her the great center of the vast import and export trade of the United States—the "Empire City." But her monopoly is by no means unassailable. It can be conquered by judicious and persevering efforts on the part of rival seaports. Since the conclusion of the reciprocity treaty with Canada, our commerce with that country has rapidly increased. In 1851, it was but insignificant. In 1855, it amounted in value to \$30,900,000; in 1856, to no less than \$50,339,770, namely: imports from Canada to the United States, \$21,310,000; exports to Canada, \$29,029,005. The Board of trade report of 1858, expresses the belief that "the vast trade of the Canadas" is "now equally accessible to us as to New York." This is an error. It will not be equally accessible to us until we possess equally direct and efficient means of transport and communication. The total value of the Lake trade is estimated, officially, at the enormous sum of \$700,000,000; \$350,000,000 worth going East, and the same amount West. Here is a rich prize to be gained. The person who first conceived the idea of the connection of Philadelphia with Sodus-bay, as proposed and advocated in the Board of Trade report of 1856, has bestowed a great benefit upon this community, which we sincerely hope will soon be turned to practical advantage.

RESULTS OF THE PANIC.

The following interesting statement has been received from a careful correspondent, showing the result of 151 of the suspensions, (including five large banks) which occurred during the commercial crisis, with a total of liabilities to be met of £41,427,569, and on which the deficiency now appears to be about nineteen per cent. Out of 52 London firms sixteen appear to have paid, or to be about to pay, in full, while of the provincial houses the number that have attained this conclusion is only nine out of 69.

RESULT OF A SUMMARY OF THE STATEMENT OF AFFAIRS submitted by 146 mercantile firms and five banks, which suspended payment during the period of the commercial crisis from the commencement of November, 1857, to the end of February, 1858.

CLAIMS.

To consideration claims.....	£35,551,997
To capital (paid up) of five banks.....	4,149,930
To liabilities claimable.....	1,725,642
To liabilities considered good.....	£10,412,355

Total.....£10,412,355 £41,427,569

ASSETS.

By available assets.....	£33,672,669
By balance carried down.....	7,754,900

Total.....£41,427,569

To balance deficiency £7,754,900, viz:

32 London firms, deficiency on consideration claims.....	£ 789,790
On liabilities.....	1,507,167
69 Country firms.....	3,167,865
5 Banks.....	3,765,887

Total.....£9,333,709

Less surplus, or in full 16 London firms...£1,094,335
9 Country do....390,474

1,484,809

Total.....£151.....£7,754,900

On an average it seems that the failures were for about £275,000 each, and, supposing the creditors to each firm, apart from those which paid in full, to be thirty, the number of houses inconvenienced would be 3,880; and the average ultimate loss of each would be £2,000. Nearly one-third of the suspended houses in London have paid in full, and about one-seventh in the provinces.

MILITARY LOCOMOTIVES.—An experiment has been made in India under the inspection of Col. Sir Frederick Abbott, in the India Company's service, of a steam engine called Boydell's Traction Engine, for the transport of guns, military stores and men, in the military service, with a view of dispensing with the use of horses or cattle. The engine used for the experiment was of 37 horse power, constructed for agricultural purposes, with the driving power applied to one wheel only. Sir Frederick in his report to the company, gives the following account of its performance:—

"At the Royal Arsenal it took in tow four guns, two mounted on ordinary, two on devil carriages, the whole load being estimated at about 43 tons. This load it drew at the rate of about three miles per hour on level ground, and at about 2½ miles up a steep hill, part of which was inclined 1 in 13. Its power of draught was very great, but owing to its driving only one wheel it was unmanageable with a load, as it could scarcely be turned to the right hand. The experiment as far as regards this individual engine, for general purposes of draught must be pronounced a failure, but the powers and capabilities as exhibited on Thursday and on previous trials,—reports of which I have seen with the select committee,—inspire me with the greatest confidence in its final success, when the machinery shall be perfected to work both wheels together, or either wheel singly. An engine so constructed and equipped with a train of carts, of a peculiar though simple form, would be able to traverse any country where an ordinary bullock-cart could travel, and, being able to move continuously at the rate of three and a half to four miles per hour, would perform journeys of little less than 100 miles in 24 hours. An establishment of such engines and carts would enable government to dispense with half the ordinary military force in India, seeing that troops could then be concentrated in one-fifth the time required by even 'forced' marches. Such self-acting railways, though immeasurably inferior in speed to fixed railways, will be more generally useful for military purposes, as they will travel in any direction and will be safe from the designs of enemies."

The patentee has offered to construct a smaller engine adapted to the service, and capable of carrying a train of carriages for 120 men at a cost of £680, which Col. Abbott recommends to the court of directors for their adoption, declaring his opinion that if successful, it will mightily aid in the economical use of our Eastern Empire.

IRON TARGETS.

We find an interesting account of some experiments which have been made at Woolwich, England, to test the power of resistance of timber lined with four inch iron plates, and also to test the durability and quality of iron plates manufactured by rolling, as compared with iron turned out by the hammer. The largest was an immense construction of timber, lined with four inch plates of iron, of both descriptions, and the total weight was thirty tons; it was placed on a foundation made for the purpose, and twenty-four rounds of 68 pounders were fired. The first fourteen rounds were fired at a distance of six hundred yards, and, after the first few rounds, the timber work gave way in several directions; the last ten rounds were fired at a distance of four hundred yards, and the work of destruction commenced was thus consummated. The timber-work of the target was completely broken and splintered, and the plates of iron made by the rolling process were cut up and split, having apparently but little adhesion. The iron plates which had been made by the

old process resisted the solid wrought iron shot much more successfully, making it evident that these plates possessed more adhesive power than the rolled plates. It is believed that the principle of combining timber with iron plates is the best that can at present be adopted; but such plates must be improved upon in order to resist the concussion of repeated discharges of heavy shot.

THE EAST INDIA RAILWAY.—The exigencies of the war in India have interfered with the progress of the great railway enterprises in that country, far less than might have been anticipated. We have a report of the state of the East India road, which runs north-westwardly from Calcutta through the valley of the Ganges, and is to extend ultimately nearly the whole length of the country to Lahore, 300 miles beyond Delhi. This report gives an account of the progress of the work to February last. This road has been already of vast service in expediting the operations of the war, and henceforward it will be of still greater utility. Seventy miles of the second track have been laid within the last half year. The number of passengers carried in the last half of the past year was 522,360, and the amount of goods and minerals transported was 70,355 tons. The total receipts of the year were £132,434, in place of £96,100 in the year 1856. The amount of capital received has been £7,661,815, of which £7,028,014 have been expended. The work has been making good progress during the past year between Allahabad and Cawnpore, of which part of the line, 60 miles have been opened for some time, and exertions are making to complete the whole line of 126 miles by June next. In consequence of the events of the mutiny, it is the intention of the government to make a change in the route, in carrying it by way of Meerut, rather than through Delhi, as heretofore intended.

COAL IN CANADA.—An attempt has recently been made to find coal near Bowmanville, which we are glad to learn has been successful. A few Cornish miners imagined, from the character of the water of a spring, that there must be coal in the locality, and, after sinking for more than 100 feet, it is announced that they have struck a vein, five feet thick. The telegraphic despatch, which is our authority, states that all the principal men in the place are satisfied now of the gratifying fact. If true, of which we have no doubt, this may open a new future for Canada.

RAILWAY BENEVOLENT FUND.—On Tuesday, the 13th inst., a meeting was held at Dudley, by the servants of the Oxford, Worcester, and Wolverhampton and South Staffordshire railways, to consider the report of a meeting held by their brethren in London, for the formation of an institution to help the widows and orphans of deceased railway men. Mr. Ivatts, the agent at Round Oak, presided, and in opening the business, commented upon the importance of a union among railway servants generally to help each other in a time of need. The scheme held forth in the report of the meeting in London was to form an institution, where fatherless children might be educated, lodged, clothed and fed, free of expense, and thus relief given to widows. It contemplated for each member to contribute a guinea a year, which, at his death, would entitle his children to admission, provided they succeeded in obtaining a majority of votes from the members, at a time when the funds admitted of increasing the number of children, or vacancies occurred. A resolution was then passed unanimously to the

effect "that they received with joyful feelings the report of the meeting of their brethren at Camden Town, for the establishment of an institution for the benefit of widows and orphans of deceased railway servants, and tendered their sincere thanks for the steps they have taken in the initiative." A discussion ensued, and the general opinion came to was, that the London schemes only offered inducements to married men, and a committee was then chosen, including representatives from each class and department, to obtain information on the subject. A strong wish was expressed to hear the opinions of servants of other Companies, and to consider any suggestions at a future meeting, with a view to submit them to the gentlemen in London.

AGRICULTURAL STATISTICS OF GREAT BRITAIN.—The following facts were mentioned by Mr. Caird in his speech in the House of Commons, on Wednesday night last:—"In 1852, our imports of foreign corn were valued at about £12,800,000, and in 1856 at £31,400,000, showing an increased export of bullion and capital in the latter year to the amount of £18,600,000, which must have produced a serious effect upon the commercial action of the country. In the four years, from 1850 to 1853, this country paid for foreign corn and rice about £64,000,000, and in the four years from 1854 to 1857, no less than £111,000,000, there having been within the last four years a total increase of £47,000,000 or an average increase of about £12,000,000 a year. The amount thus sent abroad in payment for corn must have had a material effect in causing the commercial crisis of last November. He had been informed that, in consequence of the enormous importations of rice which had taken place, £1,000,000 had been lost during the last year upon that article alone. The importations of rice began to increase in 1855, owing to the high price of corn in the previous year, and it appeared that 170,000 tons of rice had been imported from India alone during each of the last two years.

RAILROAD CONVENTION.

A Railroad Convention assembled at Council Bluffs, pursuant to a call on the 18th May, to take into consideration the practicability of constructing a Railroad from Council Bluffs to the north line of Missouri, in connection with the road from St. Joseph to the latter point. The Convention is quite a large and enthusiastic one, delegates being in attendance in considerable force from Mills and Fremont counties, and from all the principal towns along the route, on both sides of the Missouri—Pacific City, Omaha, and Nebraska City, in particular, being fully and well represented. We were glad to notice, also, some gentlemen from Northern Missouri in attendance as delegates.

Articles of incorporation have been adopted, and steps taken for a perfect organization of the company. A determination is manifested on all hands to push this enterprise to a final consummation, and it is our opinion that the road will be constructed and running from St. Joseph to this city at no very distant day. The distance from here to the State line is said to be only about 65 miles, over a level bottom, with few streams and no formidable obstacles whatever; and provision has already been made by the Legislature of Missouri for the building of a road to the northern boundary of that State.

BEET ROOT SUGAR.

The Paris *Patrie*, of the 6th ult., gives a summary of the state of the beet-root sugar manufacture in France, as shown in official reports for the season of 1857-1858, to the end of the month of February. It appears from it that there were 341 factories in operation, which is an increase of 58 on the previous year. There were 146 of them in the department of Nord; 54 in Aisne; 62 in Pas de Calais; 34 in Somme; 21 in Oise, and 24 in fourteen other departments. There were five works closed, but with sugar on hand against nine the previous year. The produce of the period stated had been 132,000,000 kilogrammes—an increase of 54,000,000 kilogrammes on the previous season. The quantity taken for consumption was 54,000,000 kilogrammes; an increase of 7,000,000 kilogrammes. The exports, deposits in warehouses, &c., amounted to 80,000,000 kilogrammes. Last year they were but 52,500,000 kilogrammes. On the 28th of February, the total in the warehouses of all kinds, and in all stages of manufacture, was 47,000,000 kilogrammes. At the same period in 1857, it was but 17,700,000 kilogrammes. There were in the entrepôts 32,190,000 kilogrammes, an increase of 12,750,000.

THE RAILROADS OF GREAT BRITAIN.—A very interesting statement has lately appeared in several of the English journals, in relation to the cost and other particulars of the British railroads. The leading facts, however, may be thus briefly rendered. These railways have cost £313,000,000, nearly one-half of the national debt. This enormous sum has been expended in the construction of railways, which have required not less than 70 miles of tunnel, 25,000 bridges, and the removal of a quantity of earth, which, according to the estimate of Mr. Robert Stephenson, would make a mountain half a mile in diameter at its base, and a mile and a half in height. Over the roads thus formed, railway trains run a distance of not less than 80,000,000 of miles per annum, or more than 3000 times the circumference of the globe; and every second of time there are 2½ miles of railway covered with trains in motion. The engines required to work this amount of railway would extend, in a continuous line, from London to Chatham; and all the carriages, if placed in one monster train, would extend from London to Aberdeen, a distance of 500 miles.

THE TEHUANTEPEC TRANSIT.—The New York Herald contains the following dispatch from Washington:

"The Cabinet has determined to recognize Mr. Benjamin's Tehuantepec Company, and the Postmaster General is instructed to make a contract for the mails.

"The Pacific Mail Steamship Company, has signed a contract with the Tehuantepec Company to take mails and passengers on the Pacific to San Francisco, and the Department has extended the Pacific Company's contract for one year in consequence—the service to commence in October. Peter A. Hargous is to furnish the money to complete the Tehuantepec road. The compensation for the mails from New Orleans to the Pacific ocean is to be two hundred and eighty thousand dollars a year for semi-monthly service, and the plan of the Government is to make the Tehuantepec the mail route to California, and to discontinue the Panama route."

MAYSVILLE & LEXINGTON R. R.—At the regular annual meeting of the stockholders of this Company, held in Maysville, the following gentlemen (all members of the old board,) were elected Directors of said Company for the ensuing year.

W. W. CORCORAN, of N. Y.
BLAKELY WILSON, "
WM. HOGE, "
LEWIS H. MEYER, "
JOHN ROSS, "
— ELLIMAN, "
— GEBHARD. "

☞ The whole estate of the Breckenridge Coal Company, near Cloverport, Ky., is to be sold at auction on the 28th of June, to pay a mortgage of \$350,000.

TAXABLE PROPERTY OF THE LITTLE MIAMI RAILROAD.—The officers of this road made a return of property belonging to the Company, and subject to taxation, within the county of Hamilton, after deducting seven and two fifths per cent. for proportion of capital stock owned by the State, as follows:—

	Real Property.	Moveable Property.
In the City of Cincinnati.....	\$257,894.05	\$66,210.36
Spencer Township.....	94,862.45	24,443.25
Columbia ".....	72,736.19	18,747.74
Symmes ".....	11,305.92	2,817.76
Total.....	\$436,798.61	\$112,249.11

This return is made under protest by the officers, that the Little Miami Road is not bound by law to make a return, or pay any tax but that provided for in her charter.—*Gazette*.

FLORIDA AND ALABAMA RAILROAD.—We are now authorized to state that, with present progress, the road will be completed to the Alabama line by 1st January, 1859; that thirty miles in construction passing through Conecuh county, Alabama, will be then in readiness for the iron; that fifty miles, from Montgomery down, will be laid with iron in the course of a few months;—and that the whole line from Pensacola to Montgomery will be completed by 1st January, 1860—or in about 19 months.

This is the opinion of the Presidents of the respective roads, Messrs. Pollard and Chase.—*Pensacola Observer*.

PEORIA AND HANNIBAL RAILROAD.—Mr. Decker, the contractor, informs us that the entire line between Peoria and Pekin and for a considerable distance this side, is now ready for the ties and iron; and that upon the southern end of the work, within the Fulton county line, over 140 hands are pushing the grading along with vigor. Mr. D. also informs us that the total estimate upon the work now done, will not fall short of \$51,000 or \$52,000. These estimates have been paid, thus far, in full.

From Lewistown to the plank-road, a distance of nine miles, the grading has all been finished since late last fall, which, for the number of hands employed and the nature of the work, evinces unparalleled industry. In a few weeks over 100 hands and teams will be put upon the road at or near Copperas Creek, and from thence progresses to the Pekin work.

Mr. Johnson, superintendent of the Vermont Division, has put on a number of parties of men at various points on the work below Spoon River. We hear that the grading is progressing rapidly at those points.

Those portions of the road already graded are said to be unsurpassed in structure. No better work has ever been done on a railroad.—*Fulton Democrat*.

MONETARY AND COMMERCIAL.

Money for the past week has been quite easy, and is readily obtained on first class paper at rates from 10 to 12 per cent. The offerings are comparatively moderate, and all satisfactory paper is taken by regular houses at the above rates. Currency is abundant, and prime paper is in demand.

Eastern Exchange is in moderate supply and demand. Dealers buy at 3-8 to ½ prem., and sell at 5-8. New Orleans buying at ½ discount to premium, selling ½ premium.

There is every indication of good crops throughout the entire country. The weather has been somewhat unpropitious for corn planting during the past month, but farmers have embraced the favorable moments, between showers, and have got the great bulk of their planting done; there is some yet to plant, which, if it has favorable weather, will still do well. In this neighborhood there has been a large breadth of potatoes planted, and they look very promising. Fall grains are already heading out, and bid far for an abundant harvest. Spring grains, although some were put in rather late, look thrifty. All grains on cold and wet grounds are, of course, more backward than usual during dryer seasons.

Relative to uncurrent money the Cincinnati Price Current remarks:

The uncurrent money market is somewhat unsettled, and dealers buy with more caution. The bank frauds in Tennessee and the railroad frauds in Wisconsin, have shaken confidence in public officers generally, and bank notes, the value of which is dependent upon the integrity of officials who have charge of the securities, are regarded with more or less distrust. The system of Free Banking, has been greatly damaged, by the frauds that have been detected in Ohio, Indiana, and Tennessee, which affected, directly, the banks; and the Wisconsin developments though, so far as known, not in any way connected with the banks, have also had an unfavorable influence. Virginia paper, as also Tennessee, Illinois, and Indiana Free Banks, are some times bought at lower rates than indicated by our quotations, but the latter are the safest guides for parties remitting the currency for sale in this market.

We annex a comparative statement of the Foreign Imports at New York for the week, and since Jan. 1:

For the week.	1856.	1857.	1858.
Dry goods.....	\$ 928,419	\$ 898,966	\$ 553,012
General Merchandise.	2,356,916	3,399,332	1,932,434
Total for the week.....	\$3,285,335	\$4,298,298	\$2,485,446
Previously reported.....	78,183,379	95,123,326	47,268,218

Since Jan. 1.....\$1,463,914 \$99,151,624 \$49,772,664

The Commissioners of the Sinking Fund awarded the Ohio State loan of \$500,000, at six per cent., as follows:

Norwich Sav'gs Socy. \$200,000 at 1-10 to 1½ per ct. prem.
Thompson Bros..... 150,000 at 5-100 "
E. R. Boyle..... 150,000 at 5-100 "

Total.....\$400,000

The exports of specie from New York last week, were \$400,300 88, and the total from Jan. 1st, \$12,661,825 29.

SALES AT THE NEW YORK STOCK BOARD—May 31.

\$ 500 Ohio State 6's, '60.....	104
5,000 Ind. St. 5's.....	78
3,000 North Car. State 6's.....	95
38,000 Miss. 6's.....	83½
1,000 Cal. 7's.....	83½
1,000 Erie B'ds, '73.....	44½
4,000 Erie Con. Bonds, '71.....	40
1,000 do. do '72.....	40
2,500 Illinois Central R. R. Bonds.....	85
500 do. do do.....	87½
6,000 La C. & Mil. L. Gt. B.....	33½
15,000 do. do.....	34
2,000 Harlem 1st Mt. Bonds.....	81½
20,000 Miss. 6's.....	83½
5,000 Tenn. State 6's, '90.....	90
14,000 Virginia 6's.....	92½
100 Shares New York Central.....	83
250 " Reading.....	41
100 " Mich. S. & N. Ind.....	20½
50 " Mich. S. & N. Ind. pref.....	44
100 " Galena & Chicago.....	85½
20 " Pacific Mail St. Co.....	69½
650 " Cleveland & Toledo.....	35½
850 " Erie R. R.....	19½
140 " Hud. River R. R.....	28
300 " Chicago & Rock Island.....	72½
100 " Milwaukee & Miss.....	27½
200 " Harlem R. R.....	11

✶ S. W. Parker, President of the Junction R. R. Co., publishes a communication in the *Connersville Times* :

Two hundred thousand dollars secured now, will bring the iron for the Cincinnati and Indianapolis Junction Railroad, as fast as needed; out from Cincinnati to Connersville, by new year next—via Hamilton, Oxford, College Corner, Liberty and Brownsville—and to extend the same to Indianapolis via Rushville, as speedily as the road bed can be prepared—ample means for which the Company now have.

One hundred and twenty thousand dollars of the above sum, is now secured in Cincinnati; and may be made available, immediately, to buy iron for the 41 miles now nearly ready for it—on condition that the \$80,000 balance is secured upon the line. *This we must now have, or postpone the enterprise, indefinitely.*

✶ The following is a statement of the receipts of the North Missouri Railroad for April, 1857 and 1858 :

	1857.	1858.
From Freight.....	\$ 964 35	\$7,067 50
From Passengers.....	2,784 75	6,999 90
	\$3,749 10	\$14,067 40
Excess for April, 1858.....		\$10,318 30

OFFICE OF PITTSBURG AND CONNELLVILLE R. R. Co.,
Pittsburg, May 18, 1858. }

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connellville Railroad Company, in the city of Pittsburg, until the **15th of June next**, inclusive, for the GRADUATION, MASONRY, BRIDGING, TRESTLING, STATION-BUILDINGS AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles, along the Monongahela River, between Pittsburg and Port Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the First Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all, the coming autumn.

By order of the Board of Directors.
ma27:3w **BENJ. H. LATROBE, Pres.**

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
no13 10 Wal **THEODORE DEHON,**
at Broadway, New York.

G. W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.
WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.
Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in a sea. ap16

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
NEW YORK CENTRAL RAILROADS.

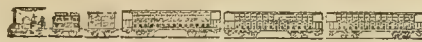
The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.
Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, }
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

CHICAGO GREAT WESTERN

AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

✶ Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House,

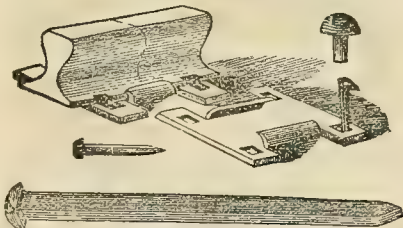
W. M. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

to 9 P. M. H. C. LORD, President.

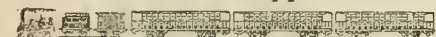
W. H. NOBLE, Gen'l Ticket Agent.

GREAT WESTERN Railroad Chair and Spike Works



WE have in use the best Chair Machinery in the country, for which we hold the exclusive right, and are prepared to manufacture to any extent, and on the most favorable terms, any pattern of Wrought Chairs, Hook and Flat Head Railroad Spikes of all patterns, Boiler Rivets, Bolts of all sizes for Bridge Work, Ship and Boat Spikes, &c. &c. The best quality of iron is used in all articles of our Manufacture. All orders promptly filled. Works No. 261 & 263 West Front street, Cincinnati, Ohio.
✶ Please direct name in full.
Feb 28 **CORBY, GOSSIN & CO.**

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

✶ A Steamer leaves Racine for Chicago every even day.
✶ Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup't.
Racine, May 15, 1857. H. S. DURAND, President.
my21

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
Feb 5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jj23-1m

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

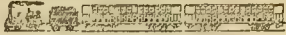
D. M. CARHART,
Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. J. 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

IRON BOILER FLUES
PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,

1½ to 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 209 South Third St.,
PHILADELPHIA. feb5STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR., S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

J. H. GOODMAN & CO.,
No. 7 Wall st., N.

Feb. 7. '56-2m.]

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND.

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro
JOEL C. LANE

feb4-11

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 859,000 yards Earth; 60,000 yards Rock; 1,600,000 feet Trestling B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging. 44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860. WM. B. MUMFORD, President.
Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO
MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars
Stores, Cemeteries, Iron Safes, &c.,Cor. Railroad Avenue and Market st.,
1 n24 NEWARK, N. J.EM OSLEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheetings always Iron.

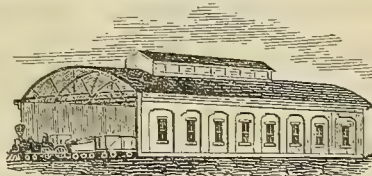
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.
Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACKING,

JING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,
64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 258 H Street, Washington, D. C. april2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 15 lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, 11.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK AND BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK AND BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

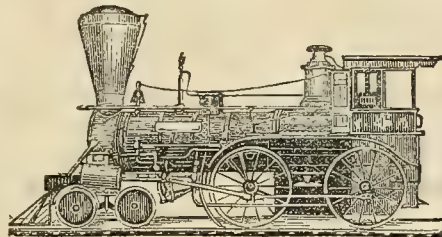
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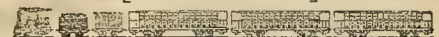
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FOR THE

NORTH, EAST, AND WEST.

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LIGHTNING EXPRESS leaves at 6 A. M., for Cleveland, Buffalo, New York, Boston, Pittsburgh, Philadelphia, and all Eastern Cities, arriving at Cleveland at 4:30 P. M., in time for FIRST FAST EXPRESS TRAIN on Lake Shore Road, reaching New York at 2 P. M. next day. Passengers are allowed 40 minutes at Clyde for dinner. Also connects at Cleveland with steamer Queen of the West and Crescent City for Buffalo.

Connects at Bellefontaine direct for Pittsburgh and Philadelphia, reaching Pittsburgh at 7:30 P. M.

Connects at Forest for Fort Wayne and Chicago, arriving at Chicago at 10 P. M. same day, WITH ONLY ONE CHANGE OF CARS FROM CINCINNATI TO CHICAGO.

Connects at Dayton for Springfield, Sandusky, Toledo, Detroit, Troy, Piqua, Sidney, and all points North, East and West.

INDIANAPOLIS and LOGANSPORT EXPRESS leaves at 6 A. M. for Richmond, Indianapolis, Terre Haute, St. Louis, Lafayette, and all Western cities.

Also, for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

HAMILTON ACCOMMODATION leaves at 7:30 A. M. Stops at all regular and flag stations.

MAIL EXPRESS leaves at 9 A. M.; reaches Cleveland at 9:10 P. M., in time for Night Express on Lake Shore Road (and supper). Also connects at Forest going East. This train makes direct connection at Sandusky at 6 P. M., for Toledo and Chicago. Also connects at Sandusky with

"STEAMER BAY CITY,"

For Detroit, arriving at Detroit in 14 hours from Cincinnati—being 10 hours shorter than by any other route.

Also connects at Dayton with Greenville & Miami Road for Union and all points on the Bellefontaine Road, and with Mad River Road for Springfield and all points on that road.

INDIANAPOLIS EXPRESS leaves at 2:15 P. M.; makes connections at Indianapolis for all points North and West.

DAYTON EXPRESS leaves at 3:45 P. M.; connects at Dayton with train for Troy, Piqua and Sidney. Also with train on Mad River Road for Springfield and Bellefontaine.

NIGHT EXPRESS leaves at 6 P. M.; connects at Bellefontaine at 1 A. M. for Pittsburgh and Philadelphia arrives at Sandusky at 4 A. M., Cleveland at 9:15 A. M., in time to connect with MORNING EXPRESS Train on Lake Shore Road. This train also connects at Forest with train for Chicago at 12:30 A. M., being the

Only Night Train out of Cincinnati

FOR CHICAGO.

This train also connects at Hamilton with train for Richmond and all intermediate points.

ONE TRAIN ON SUNDAY.

Leaves Dayton at 7:15 A. M., and Cincinnati at 3:30 P. M.

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Leave Dayton at 5 and 8:05 A. M., and 1:30 and 5:3 P. M.

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For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

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ATTORNEY AT LAW,

OFFICE:

N. W. Cor. Walnut & Sixth streets,
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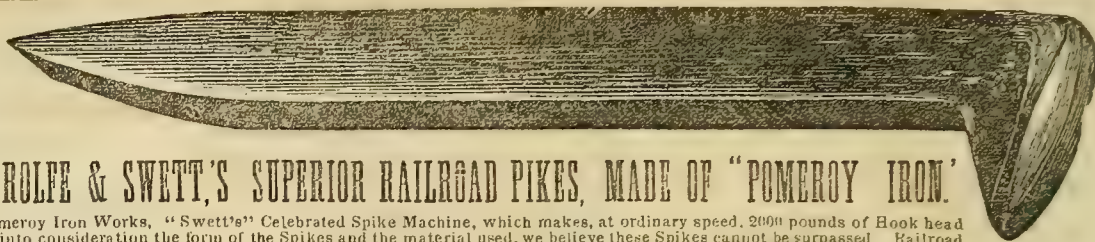
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JOHN ELLIS, Agent.

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MOTIVE SPRING

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:
THURSDAY MORNING, JUNE 10, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

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✎ The opening of the Iron Mountain Railroad to Pilot Knob, was formally celebrated on Tuesday. An excursion train was sent from St. Louis, for the accommodation of guests. The road was found to be in good order.

MILWAUKEE AND LA CROSSE R. R.

Relative to the recent election of Directors for this important road, the Milwaukee *Sentinel* remarks:

"The selection of Messrs. Smith and McGregor, to represent the home interest, will be universally acceptable. They are gentlemen of character and intelligence, and will faithfully discharge the trust confided to them. At a meeting of the Directors, held same evening, Mr. Stanton was unanimously re-elected President, and the Hon. Eli Perry, Mayor of Albany, chosen Vice President. Mr. Stanton, the President of the Company, intends to make his home in Milwaukee."

THE MOVEMENTS OF COIN AND BULLION IN THE UNITED STATES.

The precious metals have now become the subject of trade. They have lost their exclusive character of money, and have entered into general commerce, as a product of the soil. This very fact occasions more fluctuations in money, and more uncertainty, than and other cause. When gold and silver were so scarce as to be used exclusively as money, or in the most expensive and luxurious manufactures, then money was a less variable quantity. Now, it is the subject of commerce, and is exceedingly abundant one year and as scarce the next. The consequence is, that great variations in the value of property and the profits of trade are continually occurring. There never was a time, in the history of the world, when the banker, the merchant, or the capitalist required as much information, sagacity and prudence, as they do now. The revolutions of commerce are, and must continue to be, rapid and violent. The more facile and powerful are the new elements of machinery, locomotion, and geographical expansion, which modern science and art have furnished, the more unstable will be the movements. For movement in commerce is dependent on the human mind, and this acts the more rapidly and exclusively in proportion to the number of its objects, and the extent of its means. The very increase of facilities, of revenues, of wider fields, of greater credit, and in one word, of more extended action and greater power, cause a necessity for much greater intelligence, sagacity and prudence in the conduct of business, without which all must be variable, uncertain and hazardous.

The movement of the precious metals is now one of the most important elements of commerce; for, with that movement, goes the pivot of credit; or, more properly, what the philosophers call the center of gravity. All credit gravitates sooner or later round the precious metals. It is not that they themselves are of so much consequence—as that, like a weight or a measure, they are the test of strength. In this point of view, it is important to know the proportion of this strength, in different countries, and communities. In the first number of the *Record*, (page 6, Vol. 1.) we endeavored to ascertain the "Money and Currency of the United States." Since then, there have been vast changes and rapid movements in coin, currency, bullion, and in all departments of finance. We now propose to ascertain, if possible, what the movement in Precious Metals has been, so far as possible, in regard to the United States.

1. *Of Production.* The California mines have made gold an original article of produce; and hence, aided and stimulated the commerce in bullion, so that the movement of great masses of gold is now an every day occurrence.

This is not of so much importance as it is to determine *where the balance lies*. In looking for this, let us ascertain what the whole production of gold in the United States has been. This we can tell from authentic documents. In the following account, we include the gold produced in Carolina, Georgia and other places as well as in California, and give the general aggregate for each year. This will give the whole production, which being compared with the exports and imports of coin and bullion, will give the whole specie movement in the United States.

From 1804 to 1857	\$ 110,000
“ 1838 to 1837	5,063,500
“ 1838 to 1847	7,633,075
In 1848	200,673
“ 1849	7,079,141
“ 1850	26,933,333
“ 1851	50,340,612
“ 1852	54,349,093
“ 1853	55,022,051
“ 1854	57,538,158
“ 1855	49,331,777
“ 1856	47,878,119
“ 1857	49,320,066

Aggregate.....\$428,052,600

Since 1804, a little more than half a century, we have produced, as one of the staple articles of the earth, about *four hundred and thirty millions of dollars in the precious metals*.

It would be a mistake to suppose that California is an only revenue for gold and silver. The Mint returns show that eight States and territories have produced gold; and we have authentic accounts, that the Gadsden purchase (called Arizona,) abounds in silver. It is perfectly certain, therefore, that the United States will henceforward furnish its own coin and bullion; and probably supply a great deal to the rest of the world. The following are the aggregate amounts from the several States and territories:

Virginia	\$ 1,490,761
N. Carolina	8,537,093
S. Carolina	1,203,373
Georgia	6,618,142
Tennessee	20,209
Alabama	193,984
New Mexico	48,397
California	409,873,000

The mines of Carolina and Georgia undoubtedly would be worked much more than they are, if gold were not so much more abundant, as to attract the fortune-hunters and miners in that direction.

2. *Of Commercial Movement.* While we have thus been producing gold, at such a rapid rate, we have also been exporting, and importing as rapidly. The following is the result of the exportation and importation of specie from 1822 to 1858, arranged in periods of five years each:

	Exports.	Imports.
1823 to 1827 (inclusive)	\$35,236,986	\$34,639,592
1828 to 1832	21,017,530	56,300,732
1833 to 1837	21,466,819	62,030,742
1838 to 1842	34,549,684	41,300,754
1843 to 1847	21,334,792	60,180,251
1848 to 1852	106,916,165	29,598,822
1853 to 1857	240,493,181	31,488,869

Exports.....\$474,673,037
Imports.....\$314,559,792

Excess of exports.....\$160,113,245

Our loss in specie by trade in these thirty-five years, was *one hundred and sixty millions of dollars!*

As we had not one-fourth of that when we began, it is obvious, that we should have been absolutely bankrupt, but for the domestic produce of gold for exportation. With *that*, however, we have really gained largely. Let us now see how much we have gained. In the first place, we must ascertain what we had on hand in 1822. According to the best authorities, this was \$30,000,000. We have then this result, taking the amount of gold since produced only into view:

Specie on hand in 1822.....	\$30,000,000
Since produced.....	428 000,000

Aggregate.....	\$458,000,000
Excess of Exports.....	160,113,215

On hand.....	\$297,886,785
Gain since 1822.....	\$267,886,735

In the *Record* (page 6, Vol. 1) for 1853, we found the amount of coin and bullion then in the country to be \$204,000,000. We have then gained in the last four years about \$67,000,000 in specie. As these statements are all made from the most accurate statistics the government can obtain, we have no reason to doubt the accuracy of the result. They correspond likewise with our own independent calculations. Gold, as a product, has therefore been very beneficial in saving the country from the evil effects of over trading, and in providing a solid fund, for the maintenance of credit.

THE OHIO AND MISSISSIPPI RAILROAD.

At the recent Annual Meeting of the Company, the old Board of Directors practically were re-elected, although some three or four new members were introduced. There was an opposition ticket voted for, and if all the votes of the real stockholders had been received, it is supposed the opposition would have had a majority, or at least have been nearly balanced. The election of Directors, however, was unimportant, except so far as it may excite attention to the condition of the Company. One thing ought to be done, by the present managers, no less for their own sakes, than for the interests of others. Those who have had charge of the road since Aspinwall and his associates became contractors, should render a *particular* account of all their payments and receipts. It is not enough to lump accounts together in the manner in which it is done by the managers of Railroads. The stockholders have a deep interest in knowing the exact mode as well as amount of expenditures. We do not doubt that every thing has been done accurately and honestly; yet, the world are scarcely ever convinced of this, unless all the facts are spread out.

There is another thing should be attended to. The contractors report that they were unable to exchange the construction Bonds for the 2d Mortgage Bonds, in a great degree. We suppose a million or more dollars of the 2d Mortgage Bonds are outstanding.

What provision is made for the interest on them?

A good many inquiries have been made on this subject. It is quite clear that the original 1st and 2d Mortgage Bondholders can afford to buy out the road, if necessary to their interests, and provision should be made against such a catastrophe.

The managers of the road talk of "capitalization." We never exactly knew what this new fangled term meant. The road is already so far "capitalized," that it is nothing but *capital*. The bondholders would like to see something besides capital!

In truth, this "capitalization" means nothing more or less than the sacrifice, on the part of creditors, of a portion of their interest, and so also of a part of interest of stockholders. It means throwing things into *hotch pot*, and taking the chances. If all the parties interested will agree to this, it may do very well. If it is not done, there will probably be a disastrous settlement.

Fast friends of this road, from the beginning, we can give our views in brief:

In the first place, we believe the road will do *all the business* it was ever estimated to do. But, on the *nominal* stock and debts, it can never pay good dividends, even *when it does that business*. These have been nearly doubled, and for that neither the engineers nor the calculators were to blame. They may be right, and yet the financial interests of the Company fail. Now, what ought to be done is this:

Nominal stock, say.....	\$7,000,000
Put it 20 per cent.....	1,400,000

Saved.....	\$5,600,000
Floating debt, say.....	\$1,000,000
Put it 50 per cent.....	500,000

Saved.....	\$500,000
------------	-----------

How much can be saved on the securities of the Company, or whether any, we do not know; but, the Construction Bonds ought to be reduced about 30 per cent. In this way the capital of the Company may be reduced about \$8,000,000, and no one injured, but all benefitted; and we undertake to say, that *then* the road will pay, *provided* some essential improvements are made. The first and most important of these are the Cincinnati connections.

At present, passengers going East or West to or from the Little Miami and Ohio and Mississippi Railroad have to be carried nearly two miles in omnibuses or carriages, and the same, though in a less degree, with other roads. To make a continuous *through* line throughout the country, these city obstructions must be removed. The great body of men do not travel to see cities, but on business. The *termini* of roads should be brought together, and all things made convenient and pleasant for the man of business. The Ohio and Mississippi Railroad would gain much, by connecting itself with the depots of other roads.

RAILWAYS AND RAILWAY MANAGEMENT.

A great deal is said in the papers, in the streets, and in the market places about railways and railway management. Some of these criticisms have good sense for a basis; but the most of them are mere words—emanating from persons totally unacquainted with the practical working of these, the great leading interest of the day.

To manage even a short line of road is no easy matter; but great chains like the N. Y. Central, the N. Y. & Erie, the Pennsylvania, the Baltimore & Ohio, and others of like importance, with their innumerable connections, branches and feeders; with all the complicated details of a business extending to all parts of the compass; with an army of officers and men; with a bankrupt and poorly supplied exchequer, and a "national debt," more oppressive than that of England, require administrative abilities of greater extent than are needed for the management of any of the great governments of the world. To be convinced of this fact, we have but to ask ourselves the simple question,—Could James Buchanan, Lord Derby, Lord Palmerston, Louis Napoleon, Alexander the III, or any other crowned head in the world, without the aid of a national treasury, manage either of our great lines of railway as easily and as well as they manage the affairs of their own empires, or as well as these roads are now managed? Most assuredly not; and we think we could name some companies that would defy even imperial power, backed with a grand military chest, to bring into smooth working order, in any thing like a reasonable time.

No wonder then that the management of railways is open to criticism, and that sad mistakes have, and daily are committed. But we are more hopeful than many of our contemporaries, and look forward to the time when there will be a great improvement in the affairs of all our companies, and when most of them shall become honest, dividend paying corporations—and that too long before the millenium comes—unless it should arrive very speedily.

The difficulties that our railway managers have had to contend with, were enormous—at the head of which was a want of adequate means, and a proper knowledge of the practical workings of railways. These, with the evils growing out of them, together with the rapid extension of our roads—doing in ten years the work of twenty—have brought about a state of things which will require a Hercules to straighten up and put in order. But as we intimated above, we are hopeful that the work will be accomplished sooner or later on all the great leading thoroughfares of the country; and we fancy we already see "the beginning of the end."

To accomplish this work, however, successfully, there must be a new order of things.

Stockholders must take a more active interest in the management of the affairs of the Companies, than they have hitherto done. They must make a more careful selection of directors, and keep a closer supervision over their doings. They must see that there is a more perfect division of labor among the officers, and hold all to a strict accountability. But above all they should take care that all the "little leaks" caused by their own neglect are carefully stopped, and that the directors, while pursuing a system of rigid economy, are not "penny wise and pound foolish," "by watching the spigot while the cider is running over at the bung."

We have hardly the practical experience, even if we had the time and inclination, to point out exactly how these desirable objects are to be accomplished; but it appears to us that the following suggestion, if carried out, would go far toward bringing about the great reforms so ardently looked for by anxious stockholders and creditors:

1. Separate the President, who should be a good financier and an honest man, from the active management of the road—allowing him to devote his whole time and energies, if necessary, to the financial affairs of the Company.

2. Find a thorough, practical business man, of good administrative abilities, no matter whether practically acquainted with the details of railroading or not, if he is the right sort of man he will soon learn "to handle the ropes," and give him the management of the general business of the road, under the title of "Manager," or any other that may fully indicate his position. His attention should be confined to making arrangements with connecting roads, the adjustment of tariffs, the procuring of freight and passengers, and all the details connected therewith *outside* of the Company's track. In short he should be responsible for all matters connected with the general business of the road, its patrons and connecting lines, and should supply, in these particulars, the place of President, Gen. Freight and Passenger Agents, and Superintendent.

3. Confine the Superintendent exclusively to the transportation affairs of the road, its rolling stock, movements of trains, maintenance and repairs of cars and engines, and every thing appertaining to the *movements* of freight and passengers.

4. The above, with a Track Master and Master of Machinery, who should be responsible for good order in their respective departments, together with the requisite assistants, should be sufficient, under the liberal supervision and advice and sympathy—not injudicious meddling—of the Board of Directors, to manage successfully any road in the country.

5. But, with the best management in the world, no roads can be successful under the

present low rates of freights, and high speed of passenger trains. Consequently, it will be necessary to advance the rates of freight, say from 20 to 50 per cent., and to limit the speed of trains to twenty miles per hour for the mail, and twenty-five miles for the express. If higher speed is required, let there be an additional price charged, as on some of the English and European roads. If freight can not be had at double the cost for handling, roads will make more money by letting their cars stand idle, than to wear out their cars and track for an inadequate compensation.

On several of the most successful roads, a state of affairs similar to the above, already exists; but in all of them there is too much required of the President and Superintendent. It is enough for all the energies of any man in the business to manage the finances of the most prosperous of our roads; and we are sure that the most accomplished of our Superintendents can find all he can well do to take care of the movements of all the machinery on his road, be it long or short.

An intermediate man, therefore, becomes necessary, with more powers than the present freight and passenger agents, to take the full direction and management of the business of the road, and he will find, if he have the powers of a First Napoleon, that he will require them all to carry out successfully the important interests committed to his charge.

Stockholders and managers of railways will do well to ponder these things, and we have no doubt that they will come to the same conclusions as ourselves. D.

BALTIMORE AND OHIO RAILROAD.

The managers of this road have just given a very pleasant little excursion to a number of artists connected with the leading pictorial journals of this country and England. We know of no traveled route in the world where are combined so many of the beauties of nature, such a constant and varied succession of the wild grandeur of mountain scenery and the triumphs of art, as on this great line of travel from Cincinnati to the seaboard. From Wheeling to Baltimore is one constant succession of all that is grand in nature, conquered and subdued by the noblest work of art, a great iron road suited to the commercial wants of a nation. Yet, outside of a little circle of those whom business or chance have carried over this route, very little is known to the pleasure seeking world, of this great highway. To make up in some measure for this, and make its beauties known, an excursion from Baltimore to Wheeling was planned. Accordingly, on Tuesday of last week, a train was fitted out with ample accommodations, with cars fitted up expressly for this purpose, which stopped at every place of interest either for its historical associations or its native beauties, and opportunity

was given the gentlemen composing the excursion to make abundant sketches. If they have done justice to the objects of the excursion, which they seemed to have vastly enjoyed, our people will soon be fully posted as to where they can find stupendous mountain scenery without a voyage to Switzerland.

VERA CRUZ AND CITY OF MEXICO R. R.

Our readers will remember a somewhat extended notice of this enterprise published in the *Record* some months ago, at the date of the sailing of the engineering party under Col. Talcott. We regret to be compelled to notice the abandonment of the enterprise for a time at least, on account of the unsettled condition of the country. Revolution after revolution, in constant succession, seems to be the fate of our unhappy neighbor; and Mexico—beautiful, fruitful Mexico, with all its resources for agriculture, mining and commerce, seems doomed to an interminable internal struggle which will forever shut it out from the advantages to be derived from all these sources of wealth which nature has so lavishly bestowed upon it. We regret, on account of our neighbors, the abandonment of this great enterprise, which promised so much for its future prosperity, and hope the time may yet come when it may be carried out.

TRUCKS.

We notice that many of the Eastern roads are adopting trucks composed of six and sometimes eight wheels in one frame. The object of this is to guard against accident from the breaking of axles. With the ordinary four wheeled truck, the breaking of an axle is a very serious affair, and is often attended with the most fatal consequences, as if either axle breaks one end of the truck must, of necessity, drag on the ground. While with the six wheel truck this is an utter impossibility. The objection to the six wheeled truck is, they do not curve so well, and probably cause a greater wear on the rails. Experience, however, will soon decide whether the advantages or the disadvantages will most predominate.

☞ The freight earnings of the Michigan Southern Railroad for the last week in May were \$20,800, against \$18,000 last year, which is quite an improvement on previous weeks.

☞ The stockholders of the Cincinnati, Wilmington & Zanesville R. R. Co., held their annual meeting for the election of directors at Lancaster on the 20th inst., when the following gentlemen were chosen:

J. Adams, N. Schleigh, D. Talmadge, Chas. Borland, W. W. Bierce, D. McLean, A. E. Strickie, W. C. Fife, and M. Delaplaine.

The Board was organized on the same day by the election of Chas. Borland, President, and Joel Radebaugh, Treasurer and Secretary.

Railroads.

OHIO AND MISSISSIPPI RAILROAD CO.

Annual Meeting of Stockholders.

The annual meeting of the stockholders of the Ohio and Mississippi Railroad Co., was held yesterday, pursuant to notice, and organized about 9½ o'clock, by appointing Judge Hoadley president, and Samuel Trevor, Secretary.

Mr. Alsop, President of the company submitted the annual report of the Directors, together with a letter from W. H. Aspinwall and associates, both of which are annexed.

Judge Matthews moved that the documents be referred to a Committee of five persons, not directors, for investigation, with instructions to report on the same at a subsequent meeting. Carried.

Mr. Gould suggested that the vote for members of the Committee be by shares.

Judge Matthews said he had confidence that the Chair would appoint honorable men, of sufficient capacity to ascertain the facts, and firmness enough to make a report setting forth the precise condition of affairs.

Mr. Gould said he had no objection to the Chair appointing the Committee, and made a motion to that effect.

Judge Hoadley asked to be excused from appointing the Committee.

Professor Mitchell hoped the Chair would not decline.

Judge Hoadley then withdrew his objection, and Mr. Gould's motion was carried.

It was intimated that the Committee would be announced through the newspapers.

The Chair remarked that Mr. W. W. Scarborough, who had been named as a candidate for a director, desired that his name should be withdrawn.

Professor Mitchell asked to be permitted to make a few remarks. He had a large pecuniary interest in this Company, but aside from this, he had other interests which he regarded from the fact that at an early day he had made a report as to the money investment in this company; and although he still believed his estimate was correct, he observed that the enterprise had, through the several stages of its progress sunk lower and lower. In view of the present embarrassment, he urged union among the friends of the company. The troubles can be overcome only by pulling together. Some years ago the New York gentlemen undertook the work in a spirit, not, he believed, of speculation, but with a far higher object in view. It was hoped that the road when finished would be out of debt. In this respect there has been general disappointment. He attributed this to the general disaster that swept over the country. The contractors have spent more money than they expected, and undoubtedly they feel sore.—Those who hold the securities also feel sore. The latter had been led to believe the securities would be good. They have had a hard time. The contractors have had a hard time. Now let all unite. He was glad a committee had been appointed. He hoped it would be composed of good men, who would probe this matter to the bottom. He believed the contractors to be honorable men, and if it could be shown that the contract had not been fulfilled, they would be ready to make the matter right on their part.

Judge Matthews inquired if the judges of election had been appointed by the directors, and upon receiving an affirmative answer, he moved that the meeting adjourn to such a

time as may be fixed by the Investigating Committee, thirty days notice of the time of meeting to be given. This motion was adopted and the meeting separated.

THE ANNUAL REPORT.

To the Stockholders of the Ohio and Mississippi Railroad Company, (Eastern Division.)

GENTLEMEN—In accordance with the requirements of the Charter the Directors respectfully submit their Annual Report of the business and condition of the Company for the past year:

In making this report it is deemed pertinent to allude briefly to some of the more prominent causes which have operated to produce the great disparity between the actual business of the road, and that which was confidently claimed for it by its friends and the public.

From the 15th of April, 1857, (from which time the road has been surrendered to the company by the contractors) until now, there has been an uninterrupted succession of extraordinary events, which have been very disastrous to the company in its property, business and credit. The Ohio river during the entire time has afforded facilities for the transportation of through business, which, as we are informed, are almost unprecedented. This business derivable from the country extending from the head waters of the Ohio, and those of the Mississippi and Missouri, has thereby been diverted from the road, occasioning a great direct loss of revenue, whilst the indirect loss of profit has been almost as great, as it was found indispensable to adopt a tariff, scarcely remunerative, in order to induce to our road that portion of this business which we have obtained.

The condition of the highways contiguous to the line of the road has been such, for a great portion of the year, as to check, in a great measure, the delivery of the country products to the road, so that our local business has been reduced far below its fair amount under less unfavorable circumstances; whilst the small quantity of snow which has fallen upon the more northerly road, has deprived us of the advantages which we would ordinarily derive from the more eligible location of our road for winter business.

In addition to the unfavorable effects upon our revenue of the foregoing natural causes, we have participated (in common with all other roads) in those resulting from the recent financial embarrassments and general prostration of trade and travel throughout the entire country, the extent of which cannot be better appreciated than by a comparison of the business of last year upon other old and established roads with that of former years—examples are unnecessary, as we are all familiar with them.

The mild and open character of the winter and the constant rains by which it has been succeeded, have also rendered the employment of a very large extra force of labor indispensable to maintain our road way and structures in a safe condition; thereby causing a large increase over the ordinary expense of operating the road.

The importance to each of the companies forming the Eastern and Western Divisions of the Ohio and Mississippi Railroad Company, that perpetual arrangements should be concluded between them, induced the stockholders of this Company, at their last annual meeting, favorably to entertain a proposition for their consolidation; but as the directors were unable to carry it into effect to their satisfaction, a temporary arrangement was entered into, whereby the gross income of both Divisions was to be divided on a mileage basis, giving nine-sixteenths (9-16) to the Eastern and seven-sixteenths (7-16) to the Western Division; and charging to each Division in the same proportion many large expenses, which otherwise would have been incurred in full by each. Experience has shown that the practical operation of the system is somewhat against the interests of the Eastern Division, computed upon the actual receipts of each, and that the difference or loss (although at times a gain has been shown,) is not fully compensated for by the advantages resulting from a general management of the entire road. It is believed, however, that such a modification of the system, as will justly equalize any such differences, will be acceded to by the Western Division. Under this system the general superintendency of the entire line has been placed under the direction of William H. Clement, Esq., whose well known character and efficacy in all that relates to his department, is a sufficient guarantee for its proper administration.

The Directors regret that they are unable to present such a statement of the financial condition of the Company as its friends have been led to expect. And as the stockholders are generally cognizant of its condition to May 10th, 1856 (at which time the contract with Messrs. Aspinwall and associates was entered into), it is deemed unnecessary to revert to it prior to that date.

The arrearages of interest upon the funded debt was agreed to be settled by the contractors, as specified, and all accruing interest thereon up to the time when they should complete the road. The floating debt of the Company, including that due former contractors, was also agreed to be settled by them, as specified. By reference to the accompanying letter from the contractors, it will appear that prior to the 15th of April, 1857, (from which time the road was accepted from them by the Company) they had adjusted the interest referred to in their contract up to 15th day of April, 1857, except an inconsiderable amount upon such portion of the old second mortgage bonds as they had been unable to exchange; and that they had also adjusted the other indebtedness of the Company referred to in their contract, so far as they were obligated so to do. Although from the foregoing it might be supposed by some that on the said 15th of April, 1857, the Company was free from all liabilities for interest or floating indebtedness up to that date—with the exceptions named—such was not the fact.

The contractors themselves were entitled to interest on the payments due them under the contract from the several dates at which they were entitled to receive such payments, exclusive of the interest on such bonds as were paid out by them under and in pursuance of the contract. They also claim full remuneration for all adjustments of the Company's and business, which by the contract they were to have settled in Income 30th, which they were unable so to settle, but did adjust with other securities and money. They also claim payment for a balance of account for extra work or payments, which will probably prove inconsiderable in amount.

From the 15th of April, 1857, the road has been operated by the Company, and all interest which has accrued or other indebtedness which has been created since that date, the contractors were in no manner liable to pay. Nevertheless, appreciating the pressing necessities of the Company for money, for current expenses, the contractors voluntarily made such arrangements on their own account, with all the holders of the Company's Bonds (with a few important exceptions) as would keep the coupons maturing on such Bonds from presentation for payment prior to March 1st, 1858. They have likewise withheld from demand all coupons on all Bonds owned by themselves.

Owing to these arrangements and this forbearance, the Directors were enabled practically to maintain the credit of the Company up to the said first day of March, 1858. At that time, however, in the absence of any means belonging to the Company by which money could be obtained, the Directors were compelled to permit such coupons (maturing that day) as were presented, to go to protest.

All reasonable efforts were made to avert this unpleasant alternative. An earnest appeal was made to the contractors, but declined, as they were unwilling to make further personal sacrifices to pay coupons to others, whilst they were large holders of similar ones which would not be paid—with a commendable generosity, however, they contributed by way of loan to the Company, a large amount in money and good securities, to enable the Directors to provide means with which to pay in part the arrearages due by the Company on its Pay Rolls, and for supplies—without which the working of the Road must then have been discontinued.

The depleted state of the Treasury has rendered the duties of the local financial officers peculiarly embarrassing and disagreeable; but it gives us pleasure to state that the operatives, and for the most part the supply creditors of the Company, have exhibited a leniency and forbearance worthy of the highest commendation. And the Directors earnestly recommend to the Stockholders that immediate measures be devised whereby all arrearages due to them may be speedily paid.

The condition of the Road during the entire time that it has been operated by the Company, has been very satisfactory, considering the causes which have operated to depreciate it. As an evidence thereof and of its proper construction, it is only necessary to state that it has withstood the action of the late rains and unprecedented freshets so successfully, that nearly all the trains have left and arrived "on time."

Whilst the Directors are disinclined to offer any estimates as to the future business of the Road, as they would of necessity be but speculative and problematical, they feel fully authorized (in view of the extraordinary circumstances by which the Road has been surrounded since its opening) to assure the Stockholders that its future business will unquestionably exhibit a large increase over that of the present year. But notwithstanding these assurances they feel compelled furthermore to express their equally firm conviction that the requirements of the Company for means with which to pay its annual interest, its floating debt (composed to a great extent of accrued interest), its new floating debt (created within the past year), and perform its contracts with the city of Cincinnati, will largely exceed its probable net income for years to come, even if estimated on a basis to be fixed by the most sanguine friends of the Company in the Direction.

It is believed, therefore, that in order to protect the Company, its creditors, and even the Road itself, from ruinous disaster, mutual concessions should be made by all parties in interest, so as to effect such a capitalization of all interests as will leave the Road free from all indebtedness or liability except that arising under the First Mortgage, and also except the present supply and operative indebtedness, which must be paid in cash.

The following statements will exhibit the operations of the Company for the past year, and its condition so far as the same are at present ascertained to May 1, 1858:

Gross earnings for the year.....	776,916 19
Less difference to May 1, 1858, between 9-16 and actual earnings of E. D. . . .	20,441 37
	756,474 82
Less balances in hands of Agents and foreign Roads and mail money to be paid in regular course.....	43,167 76
Due from Western Division.....	58,436 15
	101,603 91
Actual receipts.....	\$654,870 91
DISBURSEMENTS.	
Amount of operating Expenses and Repairs of Eastern Division, to May 1, 1858.....	465,227 06
Interest.....	5,992 34
Materials and extraordinary repairs..	414,957 50
Real Estate.....	13,523 85
	\$899,670 75
LESS.—For liabilities, supplies, and business of the Road.....	134,746 53
Due on Pay Rolls.....	59,851 06
Due for materials and stock claims....	25,084 19
	220,681 91
	\$678,988 84
All of which is respectfully submitted.	
JOS. W. ALSOP, President,	

LETTER FROM THE CONTRACTORS.

New York, May 20th, 1858.

J. W. Alsop, Esq., President of the Ohio & Mississippi R. R. Company:

SIR—We desire to make a final settlement with your Company, and to obtain the amount which shall be found due us, in money, satisfactory securities, or evidences of indebtedness.

We have hitherto been unable to present a statement of our account, for the reason, in part, that we have deemed it important that all our engagements with parties, other than the Company, should first be fully complied with, and in part from difficulties arising from the severe and prolonged illness of the Auditor, Mr. Van Deusen. We are happy to state that both disabilities have been removed, and we therefore request that an early day be fixed upon by you for the purpose.

In order to facilitate your preparation for such settlement, we deem it proper to state generally the more important points which we shall claim to have fairly and equitably settled.

By contract we were to settle the interest, including all arrearages thereof, on the 1st and 2d Mortgage Bonds, up to April 15th, 1857 (at which time we surrendered the Road, &c., to the Company), also all floating debt, including balances due former contractors—with Income scrip at par.

The \$1,500,000 of old 2d Mortgage bonds were to be exchanged, by the substitution therefor of a like amount of our Construction bonds. We, however, were only obligated to make the foregoing settlements or exchanges, in so far as we could do so; and in the event of our inability to do so fully, we were to return an equivalent amount of Income bonds, as to the interest and floating debt—and of Construction bonds, as to the unexchanged old 2d Mortgage bonds.

When the contract was made, it was assumed by both the Company and ourselves, that the floating debt to be settled by us would not exceed \$395,000.

We were to be paid for our work and expenditures monthly, as the work progressed.

Referring to the foregoing, we have to state that we found it utterly impossible to make the settlements as contemplated by the contract, or fully to exchange the old 2d Mortgage bonds. We have, however, adjusted the interest on all the 1st Mortgage bonds, up to and including January 1st, 1858, and that upon the old 2d Mortgage bonds, (or rather the Construction bonds exchanged therefor) up to March 1st, 1858, out of our own resources. We have also adjusted floating debt to the amount of \$679,332 08, entirely out of our own resources, except \$139,361 81, settled by Income scrip.

The payments due us under the contract, average due Dec. 6th, 1856, from which time we are entitled to interest on all our bonds.

We have made large advances to the Company since we surrendered the Road, both in money and valuable securities, and are entitled to the fair value thereof, with interest.

We have an account, small in amount, composed of sundry expenditures by us for the Company, to which we are entitled, with interest.

Very Respectfully,

your obedient servants,

W. H. ASPINWALL,

and others, Associates.

By CHAS. GOULD, their Treasurer.

STATEMENT OF INTEREST ACCOUNT.

[The following memorandum intended to be read in connection with the report of the President, was, by an oversight, omitted.]

Interest upon 1st Mortgage Bonds, from April 15, 1857, to January 1, 1858..... \$101,645 83
Amount adjusted by Contractors (voluntarily) 101,135 41

Balance remaining unadjusted..... 510 42

Interest upon old 2d Mortgage bonds, from April 15, 1857, to April 1, 1858..... \$104,846 38
Amount adjusted by Contractors (voluntarily) 56,861 78

Balance remaining unadjusted..... 47,984 60

Interest upon construction Mortgage Bonds, from March 1, 1857, to March 1, 1858, upon say, \$4,000,000..... \$210,000 00
Amount adjusted by Contractors (voluntarily) 19,815 00

Balance remaining unadjusted..... 190,185 00

Interest upon Income Mortgage Bonds, from May 1, 1857, to May 1, 1858, (\$3,450,000)..... \$241,500 00
Amount adjusted by Contractors (voluntarily) 175 00

Balance remaining unadjusted..... 241,325 00

Income Bonds Scrip issued..... \$152,679 04

Redeemable in Income Bonds upon which Scrip Interest is to be calculated, and now included in the amount above of \$341,500.

The election for Directors resulted in the choice of the following gentlemen by a large majority.

James Hall, Samuel W. Pomeroy, Henry C. Lord, James C. Hall, Wm. H. Clement, Thomas G. Mitchell, Joseph Torrence, Lutz Anderson, Henry D. Bacon, Lewis B. Parsons, W. H. Aspinwall, Joseph W. Alsop, Henry Chauncey, Sam. W. Comstock, Edwin Bartlett, Ed. Learned, Charles Gould, L. D. Coman, Ed. Delano, W. Whitewright, Jr., S. L. M. Barloes.

NEW YORK AND ERIE R. R.

From the report of the proceedings in the *N. Y. Tribune*, we learn that at the semi-annual meeting of the stockholders of the New York and Erie Railroad, held June 3, 1856, a detailed statement of the business of the road was read by Mr. C. Moran, the President. The result shows a decrease in the net earnings of \$188,590 as compared with the same period of last year.

The same six months of 1856, gave a profit of \$425,387 81. The increase of the indebtedness is thus shown.

September 30th 1857.....	\$27,216,416 76
March 31st, 1858.....	27,547,026 31

Increase..... \$330,610 55

During the same period the assets have decreased as follows:

September 30th, 1857.....	\$2,236,523 12
March 31st, 1858.....	2,167,077 69

Decrease..... \$69,445 43

It will thus be seen that the operations of the Company has resulted in a dead loss during the six months of \$400,064 98.

The earnings and expenses show the following:

	1856-7.	1857-8
Gross earnings.....	\$2,704,077 63	\$2,523,143 59
Expenditures.....	1,807,605 35	1,769,543 08
Decrease in earnings.....		120,934 04
Decrease in expenditures.....		35,062 27
Decrease in net earnings.....		115,871 57

DECREASE IN FREIGHT EARNINGS.

From 1855-6..... \$226,461—14½ per cent.

From 1856-7..... 54,314—0½ " "

DECREASE IN PASSENGER EARNINGS.

From 1855-6..... \$197,906—27½ per cent.

From 1856-7..... 114 644—16 9 10 "

At eight o'clock Mr. Charles Moran, President of the road, took his place at the desk and addressed the meeting. He said the policy he had urged at the start was that as great publicity as possible should be given to the affairs of great corporations, and that those not interested had also a right to know the facts. The facts that he should bring forward would not exhibit to some a very favorable result for the past six months, but when all was analyzed (for nothing was concealed) it would be found to be more favorable than at first sight. The figures commenced in October last, in the midst of the financial revulsion, when the wealthy had no ready means and when all business for the time had ceased, and business had not so recovered itself that its good effects were appreciable in the business of railroad transportation. Mr. Moran read figures of the result of the traffic for the six months ending April 1, 1858:

Gross Revenue 6 mos. Oct. 1, 1857, to April 1, 1858.....	\$2,523,143 59
Ordinary expenses, including taxes and items in Transp. Acct. annexed.....	1,376,954 45
Extraor. Exp's—bad debts N. Y. station.....	25,375 12
Construction Account exp'd during 6 months.....	58,783 67

Revenue applicable to interest on debt and rent of Union and Chemung Railroads.....	\$1,961,613 24
Whereas these items amounted to.....	661,539 35
	901,595 33

Leaving a deficit of..... 400,064 98

This result is proved as follows:

Increase of bonded debt.....	1,060,097 74
Decrease of Materials, Fuel, Lake Erie Propellers, Real Estate and Bills and Accounts Receivable.....	365,630 39
Less:	
Increase of Long Dock investment.....	\$151,968 87
Increase of cash and cash items.....	25,003 87
Decrease of Floating Debt.....	849,588 41

Balance..... \$400,064 98

Mr. Moran also read from certain other tabular statements, proving the correctness of the above figures. He said that \$400,000 loss was a great increase; but when they took into consideration that the earnings were at the rate of only \$5,000,000 a year against \$6,000,000 and over in 1855 and '56, it was evidence that the figures for the past six winter months, and during the prostration of business, were not a criterion to judge of the business for the year. But the expenses in many instances—office and stated expenses, cost of running, repairs of engines, &c.,—were less, and in other places—repairs of cars, track and road-bed, bridges, &c.,—were more. When the disbursements were increased—as in the case of repairing cars to prevent the damaging of property in transit, and the loss of which often fell upon the Company, and in the case of the road, which a year since was in a condition which soon would not have admitted of the running of express trains, whereas it was now in excellent condition—the Company was benefited. While they had not failed to economize wherever it was advantageous to do so, they had not failed to use means liberally when it would increase the permanent value of their property. But while there had been a large decrease of travel and freight in the past year, yet the figures showed that there had not been a corresponding decrease of the receipts of the Erie Railroad. Indeed, it had more than held its own in the competition, though efforts had been made to steal its patronage from it. An agreement had been made a few months before to cut off the system of free passes; and though all others had violated the agreement soon after, yet the Erie, with rare exceptions, had kept its faith, and he asked men interested in other railroad companies to stand by the Erie in its efforts to do justice by their bond and stock-holders. People often said this theory was right, but it would not do in practice. This was wrong. What was the theory but deductions from observations in practice. What was true in theory was true in practice? No company could be well remunerated unless it was paid for service rendered, and the popularity secured by the system of giving free passes was secured to individuals who secured their popularity at the expense of the stockholders. Mr. Moran then alluded to the ruinous competition between railroads, and aimed at the want of integrity which men in high standing connected with other roads had shown in their agreements with the Erie. There was little or no profits at present rates upon either freight or passengers. An express train running at the rate of 35 miles per hour, and destroying track, was only allowed to collect at the rate of two cents a mile. Another cause of decrease of receipts which was now felt grew out of the reduction of tolls on the canals, but this decrease he did not think would be of long duration. Freight transportation was and would be more and more over railroads, notwithstanding the occasional interruptions. Mr. Moran called their attention to the facts connected with the loan proposed last fall. When he visited London scarcely a dollar had been subscribed to it unconditionally. Notwithstanding the publicity given in every available way to the effect and details of this loan, but few understood this conversion of unsecured bonds into mortgage bonds and the advantage. There was no doubt but it was better to own a secured than an unsecured bond. With a slight modification an arrangement had been made

by him which was satisfactory to English bondholders. They considered that the right of conversion of unsecured bonds into Fourth Mortgage Bonds was not a sufficient inducement. They desired that if they had \$10,000 in unsecured bonds, and they should purchase five thousand of the new bonds, they should have the right to convert one half of their unsecured bonds into Fifth Mortgage Bonds. To this he had assented, because it was only a renewal of the 1862 loan without any expense to the Company, and prolonged the 1870 loan. Last Fall these unsecured bonds could have been bought, and were bought, for 20. The cost of the same number of new mortgage bonds being par made the cost of two secured bonds 60 each, and these sold as high as 75 a short time since. When an offer was made for the three million loan there were \$10,600,000 of the unsecured bonds. Three millions of these would be absorbed by the new Fourth Mortgage Bonds, and with three millions of the 1875 mortgage bonds, would leave \$4,600,000 of unsecured bonds to bear the brunt of future contingency. Mr. Moran was not fearful for the future, but if things were allowed to remain as they were the delay would inconvenience the Company. The mortgage bonds were good, beyond all peradventure. The cost of the Erie Road and its property was \$38,000,000, and its mortgaged debt was only \$19,000,000. The interest on this was only \$1,330,000, and taking the estimate of the past two years of receipts—\$6,000,000—and the cost of running the road at 75 per cent, it would leave \$1,500,000 net revenue. These bonds could not long remain below 80 if they rode over present difficulties. And while the secured bond was good if the road went into bankruptcy, the unsecured was not. The holder of an unsecured bond could get a judgement only, and by doing so could throw the road in the hands of a receiver, which would not only prove disastrous to himself but injure others. The holder of the secured bond, if he did not get his interest paid, could get the Court to decree a sale of the road, with all its franchises.

A gentleman asked what security the Fourth Mortgage Bondholders had for their investment, if the Second Mortgage Bonds were foreclosed.

Mr. Moran said that nothing could be better for the Fourth Mortgage Bondholders than to have it foreclosed. Four millions of dollars could easily be raised to pay the Second Mortgage.

An inquiry was also made as to what was proposed for the stockholders.

Mr. Moran said he would answer by an illustration. Let a stockholder owning 200 shares of stock buy \$10,000 in bonds, paying one half in unsecured bonds bought at present rates, and the cost of the new secured bonds would be from 68 to 70. Let all the stockholders buy at these rates and they could sell their bonds two days afterward at 64, and the loss upon the bonds would not equal \$2 a share upon each of their shares of stock, while the result would be, by relieving the Company of its difficulties, that the stock, now selling at 18 and 20, would go up to 35. The mere rumor that he had succeeded in getting the loan in Great Britain had caused a rise in the stock to 35 some time since.

The gentleman inquired if the stock could not be taken for secured bonds.

Mr. Moran said that such would be illegal.

The gentleman said that such had been

done by the Michigan Southern and Northern Indiana.

Mr. Moran said that he was aware of that, but there was not a Court in the country which would not pronounce against the legality of such an act. A combination of circumstances had thrown the road into its present embarrassing situation. The strike of 1856 had resulted in a loss of a million of dollars to the road; and, worse than all the resort of the Directors to chattel mortgage to raise money. This caused a withdrawal of confidence in the soundness of the road.

After some further interrogations and answers, in which Mr. Moran reassured the meeting of his confidence in the success of the Company in the future, the meeting adjourned.

THE RAILROAD SYSTEM.

Prominent among the causes of the late financial crisis figures our railroad system, which has proved to be an almost unmitigated fallacy. A great many railroads in the United States are unable to cover with the annual proceeds the working expenses and repairs.—Comparatively very few are in a condition to pay interests on their bonds, and in most instances the original investments are sunk, the stocks being worthless, never having yielded dividends, and they never will. Our railroad system, viewed as a whole, is a losing concern. It totters under heavy, incessantly accumulating floating debts. This is a great national calamity. In a country of distances, such as ours most emphatically is, the efficiency, financial and technical, of the means of transport and travel is a matter of vital consequences.—In the first flush and flurry of excitement, occasioned by the financial crash, fair promises were made of reforms, but all seems forgotten now, and the danger is that we shall go on blundering and mismanaging as heretofore, with results only worse. In our own State, very important railroad connections have yet to be constructed—connections upon which the prosperity of this community depends, and that of the adjoining States, and unless certain wholesome and necessary reforms be introduced into railroad legislation and management, the probability is that we shall not be able to obtain the capital required to complete our net of railroads. The abuses, fallacious and corrupt practices which prevail in the financial department of railroads can be reached, beyond all doubt, by legislative action. Railroads can be made self-sustaining. They are so in Europe, and we who have boasted so loudly and so much of our superior business abilities, may learn something in this and many other respects abroad. One of the most prolific sources of mischief with us is the recklessness and levity with which charters are granted to irresponsible persons, who have no solid stake in the work contemplated, who subscribe for hundreds of thousands of dollars being hardly, if at all, in a condition to meet the first installments, and who throw the stocks upon the market at any price, thus discrediting the enterprise from the start. An immediate and inevitable consequence is the difficulty to obtain capital afterwards. Bonds are issued and have to be sold at a discount of from one-third to one-half of the figure they bear on the face, and on which some 7 per cent. are to be paid, so that in reality the interests amount to 10 and 14 per cent. in many instances. It is not to be marvelled at, that under such circumstances a road when completed is virtually bankrupt. In France, Prussia, and other well governed

European States, this description of swindling is most effectually prevented. No charter is granted before the entire capital required for the construction of the road is signed. On application for a charter an estimate has to be submitted of the cost, and this is investigated by a committee of government engineers and reported upon, whereby excessive issues of bonds or the contracting of debts is obviated. The non-payment of any one installment works the forfeiture of the stocks subscribed to, and all previously paid upon them. The original stockholders are thus not defrauded. They are not compelled to issue bonds at ruinous discounts and exorbitant interests. They are, and remain, as it should be, the proprietors of the line, and the total of bonds and floating debts does not, as with us, exceed the capital stock. The government there, attends to its business, and the law is such as to protect the interests of bona fide projectors and the people against fraud; abuse and swindle. Our misfortune is that our lawmakers don't know much about these matters. They legislate without understanding the elementary principles of legislation, and the result accordingly is confusion worse confounded in public business. Nor is this all. Even in a technical point of view our railroad system is a failure. We boast of building the cheapest roads. This is true only in a very limited and contracted sense. Our constructions are cheaper than those of Europe, in the outset, but at the long run, they prove infinitely more expensive. We complete a mile of road for \$40,000 on an average; Europe expends upon it \$100,000, and more. We build less substantial, and the consequence is that the working expenses and repairs are enormous. In our reports they are generally put down at from 50 to 60 per cent. of the gross receipts, but in reality they amount to much more. In Europe, repairs and working expenses amount to about 50 per cent. of the gross revenues, but the roads are actually kept in excellent order, while, here, repairs accumulate so that finally loans have to be contracted to rebuild portions of the superstructure. European roads set aside from twenty to twenty-five per cent. of their gross proceeds as a deterioration fund, to renew whenever necessary, the superstructure and rolling stock. No such reservations are made here. True economy dictates, then, a more solid method of construction, than that hitherto pursued. European roads are paying and profitable concerns; the system is self-sustaining, and that is the main point. Of \$1,040,000,000 invested in the United States in railroads, \$500,000,000 are subscribed stock, and on this amount a dividend has been paid of only two per cent. on an average last year. The interest on bonds has not been paid in a great many instances, and much of what was paid, was done by increasing the floating debts. In England, stocks yield on an average five per cent., and loans three per cent. In France, the average dividend on stocks is nine per cent. Prussia has built her railroad net, without borrowing a dollar abroad, and her dividends on stock average 6½ per cent. The governments of continental Europe see to it that no competition lines are built. They are in reality a national loss. But on the other hand, care is taken that the best route be selected, and provisions are made against monopolizing tendencies and practices on the part of railroad corporations. Before we launch again into railroad operations, the important subject should receive due legislative consideration.—*Pennsylvanian*.

BOSTON BOARD OF TRADE.

We have before us the Fourth Annual Report of the Boston Board of Trade. From this report we gather some interesting information in regard to the trade of our sister city—a city claiming to have been the nursery of American commerce. It is not pleasant to be reminded by this volume of the neglect hitherto by this city to collect and preserve the yearly records of our trade. But from the recent action by the Chamber of Commerce of this State, we have every reason to believe that the chronicles of our commercial progress will hereafter appear in a more enduring form than in an annual newspaper summary.

One important result of the labors of the Board of Trade, is the information obtained in regard to inland transportation, including the tariffs, time tables, and frequency of transshipment of the various trunk Railroads in the country. We would suggest this to be an important subject for investigation by our Chamber of Commerce. The internal and foreign trade have such an intimate mutual dependence that the same association should overlook the interests of both.

The Report includes a list of the wrecks and casualties to Boston vessels and to vessels engaged in Boston trade during the year 1856. From this we compile a summary showing the causes of these wrecks as follows:

CASUALTIES TO BOSTON VESSELS AND TO VESSELS IN THE BOSTON TRADE 1856.

	Boston.	Others.
Disasted.....	1	2
Missing.....	6	9
Abandoned.....	10	15
Returned in distress.....	12	8
Damaged.....	42	21
Stranded.....	44	65
Collision.....	21	20
Leaky.....	59	44
Lightning.....	2	2
Burnt.....	1	1
Total.....	198	187

The division of this statement according to the months in which the casualties occurred, shows a great excess in the month of January, and small numbers in the month of August, October, November, and December. These latter months are generally considered as among the most disastrous to shipping, but these statistics would prove otherwise.

	Number.
January.....	72
February.....	44
March.....	47
April.....	44
May.....	25
June.....	27
July.....	22
August.....	16
September.....	30
October.....	17
November.....	1
December.....	21
Total.....	385

The following extract in regard to the Calcutta trade, shows the necessity of the interests of American trade being protected by a liberal spirit among ship owners at home, if for no better reason than because their interests are mutual with shippers:

"The trade for the last two years has been extremely unprofitable, and this is mainly attributable to the bad system on which it has been conducted. Most of the cargoes were imported in chartered ships, and it was this impolitic mode of obtaining ships, which, more than any other cause, forced up prices in Calcutta to the extreme, and previously unheard of rates, which ruled there for two years, and lead to such heavy losses here.

"Most ships were chartered with no other

condition in the charter parties than that they should proceed to Calcutta, where charterers' agents should provide a full and fair cargo of dead weight and measurement goods, within from forty to sixty days, with which they were to return to this country, and on which the charterers were to pay the owners of the ships a certain rate per ton. The same pernicious system of chartering ships also prevailed to a great extent in England.

"Now the native merchants of Calcutta are by no means fools; on the contrary, they are among the shrewdest in the world, and when they see a fleet of some fifteen or twenty vessels in port, all of which they know are bound to have a certain quantity of saltpetre, linseed, gunny cloth, gunny bags, jute and hides, within forty to sixty days, they combine and regulate prices accordingly. Not only do they know all this, but through the information which they get from native Bunians, they can tell almost as accurately as the Boston *Shipping List* the number of American ships due in Calcutta for months ahead. They likewise have a way of keeping back produce up country, and feeding the bazaars sparingly, so that stocks of goods in Calcutta may appear small. Now all this might be easily avoided, and in fact is of late being very generally remedied, by inserting deviation clauses in all charter parties, whereby charterers' agents, for a certain consideration, may, if prices in Calcutta are too high to render it prudent to load, alter the destination of the ship entirely, or employ her temporarily in coastwise freighting, until a favorable time may arrive to load at fair prices."

The Report includes the abstracts of the late Tariff Decisions, Statistics of the Trade of Boston, and a special report on the Financial Crisis of 1857. All of which we commend to the notice of those wishing information on those subjects.—*N. Y. Cour.*

Foreign Correspondence of the Pennsylvania Inquirer.

MANCHESTER, (Eng.) May, 1858.

At the station we found that "Excursion" tickets were issued to Manchester, and as we had only one day to spend there, we took a ticket available for three days only, for which we paid about three dollars for the whole trip in the second class cars—as the distance from London to Manchester is 205 miles, one could not complain of the price charged. By the office was posted, "insurance against accidents." I purchased for a penny (two cents) an insurance for two hundred pounds—one thousand dollars—in case of death. Proportionately for accidents. Two-pence will secure £400; and four-pence £1,000. With this admonition of the danger of railway traveling—which brought to mind a horrid accident which took place upon that road only a week before—we took our seat, with the comforting assurance that if anything did happen, we were good for £200.

Insurance companies on the above principle have also been established in this country. We have but little faith, however, in their practical working, for were everybody to thus insure, and the parties themselves, or rather the insurance companies for them, assume the risk of life or limb, railroad companies, now most criminally reckless of life, relieved of the pecuniary risk, would become doubly reckless. Could we have some of the salutary penal regulations that govern in the construc-

tion and management of railroads in England, we would then commend the "insurance against accidents."

MANUFACTURES IN MASSACHUSETTS.

We recently gave a return of the manufactures of the State of New York, according to the census of 1855. The following are some figures in relation to those of Massachusetts for the same year:

	Quantity.	Value.
No. of mills.....	294	
Spindles.....	1,519,537	
Cotton used.....	105,831,749	
Yards cloth made.....	314,926,537	\$24,359,212
Yarn.....	3,321,146	820,546
Cotton thread.....	534,793	2-5,934
Batting.....	4,825,646	395,374
Pelisse Wadding.....	3-0,000	139,865
Cotton flannel.....	3,227,620	120,056
Cotton wicking.....	15,000	9,550
Total value.....		26,140,537
Capital invested.....		31,961,000
Males employed.....	11,937	
Females employed.....	22,830	
Calico printed.....	61,040,000	5,143,000
Goods bleached.....	1,000,000	70,400

Total.....	5,213,000
Capital.....	1,980,000
Bleached and colored.....	66,410,000
Calico.....	483,400
Capital.....	659,000
Hands.....	644
No. of mills.....	146
Setts.....	695
Wool used.....	18,726,298
Broadcloth.....	759,627
Cassimeres.....	6,144,585
Satins.....	6,736,082
Jeans.....	1,948,609
Flannel or blanketing.....	10,279,227
Woolen yarn.....	669,957

Total value.....	12,405,512
Capital.....	7,305,500
Hands.....	10,090
Carpentering mills.....	13
Cotton used.....	53,000
Wool used.....	2,860,974
Carpets.....	1,983,400
Capital.....	1,369,819
Linen factories.....	4
Linen.....	2,600,000
Linen thread.....	1,150,000
Capital.....	1,240,000
Capital.....	200,000
Capital.....	550,000

The aggregates of these figures, as compared with 1845, show results as follows:

	1845.	1855.
Cottons.....	\$12,193,449	\$26,140,537
Calico.....	4,779,817	5,213,000
Bleached.....	2,264,700	5,111,900
Woolen.....	8,877,678	12,105,512
Carpentering.....	834,322	1,369,819
Worsted.....	634,566	1,448,740
Hose.....	94,892	207,160
Linen.....	145,000	1,440,000
Silk.....	150,477	300,000
Total.....	\$39,995,131	\$53,328,971

This gives a very satisfactory increase in the value produced in the State.—*U. S. Economist.*

GOLD AND CHINAMEN.

The gold fever appears by the late California accounts to be rapidly on the increase again. The production of the two countries since the discoveries of Australia, are given by the *Alta California* as follows:

	Australia.	California.	Total.
1851.....	\$ 2,083,060	\$12,582,605	\$14,665,755
1852.....	41,734,320	46,586,134	88,320,454
1853.....	42,293,860	57,331,024	100,133,884
1854.....	36,023,680	51,528,653	87,552,333
1855.....	45,296,820	43,080,211	86,970,031
1856.....	52,866,740	48,867,513	101,774,253
1857.....	49,673,820	48,976,207	98,650,027
Total.....	\$269,697,760	\$338,712,467	\$608,410,227

This has been the result of mining during the last six years, and the Californian estimates that some \$200,000,000 in addition to this has found its way into the world at large through private channels. The results for

the last year, it is apparent, have been above the average of previous years, and for the present year the results are still greater. The value of gold, it is to be remembered, is now greater than it has been since the discoveries in California, relatively to other metals, and the excitement in California relation to new discoveries seems to be very great. In Carson Valley the newly discovered diggings are represented as "fabulously rich," and the discoveries on Fraser river have created a still greater excitement. These circumstances are likely greatly to promote the production of gold. The California papers advise caution to those who are so eager to seek the new diggings, but do not contradict the reports, seeking only to moderate the excitement. The chances are that the gold product from all quarters will be greatly larger in 1858, than it has been in any former year.

The people of California seem determined that John Chinaman should no longer thrust in his "chop sticks." They have passed a law which provides that after Oct. 1, 1858, no person of the Chinese or Mongolian race shall be permitted to enter the State of California, and any person aiding or assisting them to come, in any way, shall be fined not less than \$400, and be imprisoned in the County Jail not less than three months. The landing of each person is a separate offence. This is pretty well, certainly California came into the Union as a "free State," and she takes the freedom of keeping out persons that she don't like. The Southern States forbid free blacks from coming there. Some of the Western States forbid blacks from coming into them at all. New York and Boston impose "duties" on emigrants, and California has begun the "prohibitive" system. As she has a pretty good Chinese population now, the new law is probably a step towards home production. The Chinamen carried a good deal of the metal home in small sums, but their neighborhood does not seem to be desirable.—*Economist*.

COLTS REPEATING FIRE ARMS.

A correspondent in the London, England, Military and Naval Gazette, of May 8th, 1858, pays the following just and merited tribute to Col. Saul Colt's world renowned repeating fire arms.

THE BEST ARM FOR SOLDIERS,

Sir.—I am much pleased to see that in your able article of the 1st inst., on "the Best Arm for Soldiers," the use of Colonel Colt's repeating rifles and pistols are so strongly recommended for our troops.

No thinking man, or one who has had the least experience in the use of fire arms, can have any doubt of the positive duty of our Government to keep our Army in every respect, as far as possible, in advance of those of other nations, but more especially so in regard to firearms, on the skillful use and efficiency of which so much depends.

Let us, for instance, suppose, as you so aptly remark, the case of a French or any other Regiment, armed with double-barrelled rifles, opposed to one of ours, with the single-barrelled Enfield rifle—I should like to know where our men would be after they had fired the first round, and had some short space of quarters to charge over before coming to close quarters?

have given a good deal of attention of

late years to the different firearms so perseveringly brought forward as "the latest improvements," which I have tried myself in every case where I could obtain them to use, and after carefully considering the advantages and disadvantages of the various systems, I am now fully persuaded that Colonel Colt's repeating arms, both pistols and rifles, are the only trustworthy and efficient weapons yet produced, and as far in advance of all others as the double-barrelled percussion gun is to the old single-barrelled "tinder-box" of bygone days.

As an Englishman, I confess to have had a strong predilection for English weapons, and before I had compared the various revolvers I thought I should find Adams at least in superiority of workmanship, far beyond the Anglo-American Colt but am sorry to say that here again, as by the yacht America, we are fairly beaten by the "Anglo-Jonathan."

I find from actual experience that the system of cocking and firing by a continued pull at the trigger, which was first used by Colonel Colt, and soon discarded by him on account of its liability to premature discharge, rendering it an exceedingly dangerous weapon for any one to carry, as the cases of Captain Donovan and Dr. Gavin, in the Crimea, clearly prove, to say nothing of others, is a very inconvenient system, because it destroys all truth of aim, and from the sudden manner in which the hammer is liberated by and during the pull of the trigger it is quite impossible to prevent the barrel being diverted from the line of aim, and though many persons are captivated by the enticing idea of firing five shots by only pulling the trigger, I gave up all thoughts of purchasing one on that principle, as I could not be sure of its being of any utility to me at a greater distance than, say ten yards, so I decided from the experiments I myself had tried, to obtain a Colt's belt pistol, which gives me six shots, at a less price, is a far more efficient as well as a superior weapon, and will I know do me good service in time of need.

I trust that the hints for the formation of a "Royal Rifle Club" will not be lost upon our young men, as I am convinced it would be found a far superior, as well as a more useful pastime, than idling away their time in the parks, or lolling over the counter of a cigar shop.

The revolving rifles of Colt, which I have tried very severely, are I think, inimitable, and above all others adapted for the members of such a Club, being beautifully finished, carefully made, of great range, and moderate in price, and very easy to load, and in the hands of one accustomed to the use of the rifle, an unerring weapon, they will, I trust, ere long be in the hands of at least some of our Regiments, and now that the incomparable excellence of breech-loading in comparison with muzzle loading is fully admitted, it is certainly time that the matter were taken up, especially as the Americans, after very severe tests, and trying them against all others are now adopting 2,000 of Colt's revolving rifles into their Service, whence it will, I doubt not, soon drive the old muzzle loader.—I am &c., &c.

At a meeting of the Board of Directors of the Cincinnati and Marietta Railroad Co., held at Chillicothe on Saturday, the resignation of Noah L. Wilson, as President, was accepted, and Wm. P. Cutler was elected to fill his place. Beman Gates was elected Vice-President and Superintendent.

MONETARY AND COMMERCIAL.

Since our last the aspect of the money market has been very quiet.

The best class paper sells readily at 10 to 12 per cent., while inferior finds very few purchasers even at high rates.

Exchange has been very dull, and some tendency to decline.

Some excitement is occasioned by the attempts of one or two Bank Note Reporters to levy black mail on some of the Eastern Banks.

The market for uncurrent money is confined to comparatively few dealers. Rates are, therefore, very uniform.

The continued rains are much complained of by farmers as delaying the planting.

We subjoin our usual quotations from Hewson and Holmes:

The money market is without change, with an abundant supply of currency. Rates of interest, with strictly first class names, vary from 10 to 12 per cent., while some difficulty is experienced in placing names not so well known at 18 to 24 per cent.

The exchange market drags dull and heavy with a moderate demand for New York, Boston, Philadelphia and Baltimore at 3-8 to 5-8 prem. New Orleans $\frac{1}{2}$ dis. to par. American gold $\frac{1}{4}$ to $\frac{1}{2}$ prem.

SALES AT THE NEW YORK STOCK BOARD—JUNE 7.

\$20,000 Ohio State 6's, '68	104
5,000 North Car. State 6's	96
5,000 Miss. 6's	64½
10,000 do.	64½
2,000 Erie Con. Bonds, '71	39
2,000 Hud. 2d Mt. B.	62½
12,000 L. C. & Mil. L. Gt. B.	31
11,000 do. do.	30½
1,000 Chicago & Rock Is.	93
5,000 Miss. 6's	84½
300 Shares New York Central	83
160 " LaCrosse & Milwaukee	6½
150 " Reading	42½
150 " Mich. S. & N. Ind.	20½
50 " Mich. S. & N. Ind. pref.	43
10 " Clev. & Pitts.	10
100 " Galena & Chicago	45½
175 " Pacific Mail St. Co.	75
200 " Cleveland & Toledo	34
101½ " Erie R. R.	16½
50 " Hud. River R. R.	27½
50 " Chicago & Rock Island	71½
105 " Milwaukee & Miss.	25

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE, AND AT PRIVATE SALE BY HEWSON AND HOLMES,

June 9, 1858.

BONDS.

\$10,000 Cov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds	50
\$6,000 Cov. & Lex. R. R. Co. 7 per cent.	
3d Mort. Bonds	35
\$5,000 Indianapolis & Cin. R. R. Co. 7 per cent.	
2d Mort. Bonds	73
\$2,000 City of Cincinnati 6 per cent. Water Works' Bonds	90 and int.
\$5,000 Cin. Ham. & Day. R. R. 7 per cent.	
1st Mort. Bonds	85 and int.
\$3,000 Ohio & Mississippi R. R. Co. 7 per cent.	
2d Mort. Construc. Bonds	25
\$1,000 Col. & Xenia R. R. Co. 7 per cent.	
Divid. Bonds, due 1860	90
\$4,000 Indiana Cent. R. R. Co. 10 per cent.	
2d Mort. Bonds	75
\$2,000 Town of Perrysburgh, Wood Co., Ohio, 6 per cent. Bonds	50
\$1,000 Hamilton Co., Ohio, 6 per cent. Bonds	85

STOCKS

150 Shares Ohio & Miss. R. R.	5
20 Shares Cin'tn. Hamilton & Dayton	40
100 " Little Miami R. R. (with Div.)	80
67 " Cto. Insurance Co.	82
80 " Washington Insurance Co.	97½
25 " Firemen's Insurance Co.	100
20 " Farmers' Bank, Ky.	117

MISSISSIPPI AND MISSOURI RAILROAD.

The vote in Iowa County, Iowa, on subscribing \$100,000 to the stock of this Company, was carried by a decided majority. Mr. Fareham, the contractor, gave positive assurances that the road would be completed and running to Marengo this year. That section is about thirty miles. As much more will carry it through Poweshiek County; and it is hoped that within another year it will be completed to Des Moines city.

The following letter from Gen. Dix, will show the designs of the Company. It was, however, written prior to the above vote.

NEW YORK, April 28, 1858.

DEAR SIR:—Your letter to Mr. Downey was duly received, and I am glad to learn that the question of subscribing to the stock of your road for the purpose of aiding in its construction, is to be submitted to the people of your county for their votes. You can not be more anxious than the Company are to commence work at Iowa city and push the work through to Council Bluffs. We shall do so as rapidly as we have the means. If your proposition succeeds, it will enable us to commence at an early day, and we hope to be able before the end of a year from this time to have our road in operation not only through Iowa county but in Poweshiek. We have always been reluctant to give pledges, because we can never foresee contingencies; but when you remember that no county or city in Iowa has aided us without having our road carried through it, you have a better assurance than any words of ours could give that any assistance you may render us will be met in the same manner that it has been in other quarters.

Respectfully yours,
JOHN A. DIX.

CONVENTION OF RAILROAD AGENTS FOR LOST BAGGAGE.—A semi-annual convention of agents for lost baggage, connected with the various railroads, was in session at Chicago last week. The main object of the meeting was to recover and restore to the owners all such baggage and freight as has been lost on the different roads. Thirty-three pieces of lost baggage and freight were found by the railways represented, and will be restored to their owners. The convention has adjourned, to meet again at Chicago, on the 16th November next.

The receipts of the New York and New Haven Railroad for May, 1858:

Passengers.....	\$56,907 86
Freight.....	12,000 00
Total.....	\$68,907 86
For May, 1857.....	77,038 81
Decrease.....	\$8,140 95

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

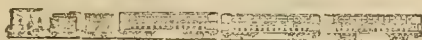
The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, } Alton Ill.
G. R. DYKEMAN, }
O. W. CHILDS, } Syracuse, N. Y.
J. S. MILLER, } Litchfield, Illinois.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation; the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Panna, Peoria, Donleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnett House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, at Broadway, New York.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

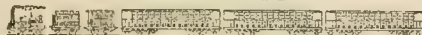
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even ing.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup'l.

H. S. DURAND, President.

Racine, May 15, 1857.

my21

W. G. HYNDMAN'S

Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap:3 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
Feb 5 tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, Jr. of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jj23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

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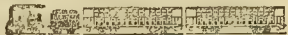
T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy. 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

OR SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

IRON BOILER FLUES
PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

of 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 209 South Third St.,

PHILADELPHIA.

[eng

STEPHEN MORRIS,

CHAS. WHEELER, JR.,

THOS. T. TASKER, JR.,

S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

J. H. GOODMAN & CO.,

no. 7 Wall st., N.

Feb. 7. '56-2m.]

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

LOCOMOTIVE & HAND LANTERNS,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

feb4tr

JOEL C. LANE

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,600,000 feet Treasting B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging. 44 miles of Road, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.

W. B. MUNFORD, President.

Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

112½ NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

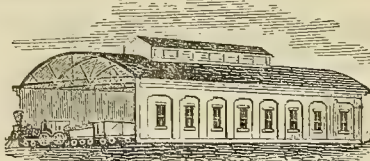
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$23 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O. may13.

MOSELEY & CO.

DAVENPORT...M. D. WELLMAN...C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACKING,

DUDGEON'S HYDRAULIC JACK

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND.

Consulting Engineer,

64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C.

apl12

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 100 lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, 1858.

VOSE, LIVINGSTON & CO.,

9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

-TO-

WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via **LITTLE MIAMI RAILROAD**; connecting at Columbus with the **CENTRAL OHIO RAILROAD**.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

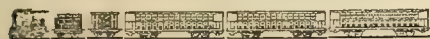
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

1887

LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, C.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

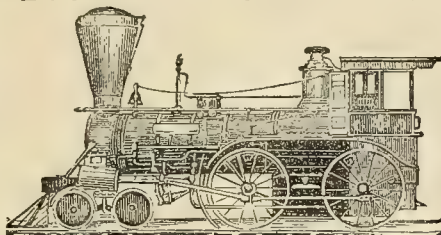
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 15TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3.30 P. M.
FOR INDIANAPOLIS—At 6 A. M. and 2.30 P. M.
FOR LAWRENCEBURG AND AURORA—At 5.45 P. M.

FREIGHT—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5.30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

FOR TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,
Acting Superintendent.

Omnibuses run from the principal hotels, and call on orders left at the Ticket Offices.

Omnibuses for 5.45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,
Ag't Cin. and St. Louis Omnibus L
Office No. 2 Burnet House.

Jan2

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
Jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Tayon, Indianapolis and Chicago Express.

7.30 A. M.—Dayton, Lima and Sandusky Mail Express.

4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Washash Valley Road.

7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6.00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8.05 A. M., 2.30 and 6.00 P. M.

Leave Hamilton at 6.55 A. M., 9.40 A. M., 12.10 P. M. and 4.05 and 8.00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

OFFICE OF PITTSBURG AND CONNELLSVILLE R. R. Co.,
Pittsburg, May 18, 1858.

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connelville Railroad Company, in the city of Pittsburg, until the **15th of June next**, inclusive, for the GRADUATION, MANORRY, BRIDGING, TREESTING, STATION-BUILDINGS AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles, along the Monongahela River, between Pittsburg and Fort Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the form of Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all the coming autumn.

By order of the Board of Directors.
m273w BENJ. H. LATROBE, Pres.

WAREHOUSE
No. 5 FRONT STREET
Opposite Public Landing,
Cincinnati, O.

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We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for sale. Also, a full assortment of the Pomeroy Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.
Cincinnati, March 5, 1856

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

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PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.
MACHINERY of the most approved construction for Flouring and Saw Mills.
GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
STEAM BOILERS and WATER TANKS of any size or description.
SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,
—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

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Blank Books of every description, with or without printed headings, got up on short notice.
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112, Main Street, Cincinnati

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ATTORNEY AT LAW,
OFFICE:
N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

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Locomotive Works,
SCHENECTADY, N. Y.

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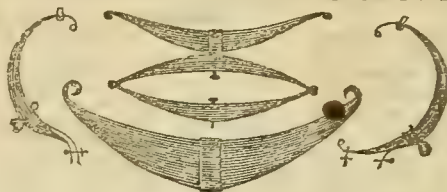
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AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Supt.,
Aul16.1y

McDANIEL & HORNER,
LOCOMOTIVE AND CAR SPRING
MOTIVE



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.
McDANIEL & HORNER.

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May 19.

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THOMAS DOUGHERTY, Master Mach. do.
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EITHER SINGLE OR DOUBLE PLATE.
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To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

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WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable rights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

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RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents, with Time-tables only.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents, with a complete Steamboat Directory.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated. No. 1.

CONTENTS.—Peter Funk Shops; Patent Safe Swindling; Pickpockets; Garroters; Gamblers, etc., etc. Price, 10 cents.

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CONTENTS.—Lotteries, Gift Enterprises, Employment Offices, Partnership Swindlers, Bogus Ticket Offices, Confidence Women, She Sharks, Indignant Husband Dodge, Hackmen, Hotels, etc. Price, 10 cts. (All sent free by mail.)

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, JUNE 17, 1858.

Railroad Record

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SOUTHERN PACIFIC RAILROAD.—The Cincinnati Gazette says:

Several able and energetic men are looking after the interests of *bona fide* stockholders in the Southern Pacific Railroad at the South. A legal gentleman who is attending to matters connected with this business, writing us from New Orleans, says: "Col. Todd, of Kentucky; Dr. Fowlkes, of Tennessee; Hon. T. Butler King, of Georgia; E. Post, of New York, and others, are energetically acting for the benefit of *bona fide* stockholders. They will accomplish all that can be done. The President and Secretary, just before the advertised day of sale, have sent in their resignations, and the latter officer has gone to Marshall, Texas, to attend that sale."

This is rather amusing when we consider who were the original Company. If the Company have received any "pups" in trade, from whom did they get them?

VOL. 6.—No. 17

THE MONEY MARKETS OF THE UNITED STATES.

In our last number we gave a review of the results of mining and commerce on the relative stock of precious metals in the United States. The result showed, that notwithstanding the enormous exportation of gold to foreign countries, we had, nevertheless, increased our coin, in the last five years, by about thirty-six millions. This was brought about solely by the immense quantities of gold mined in California. Without that, we must inevitably have been swamped in debt, and the revulsion of 1857, must have occurred long before, and with ten times the severity. We have been saved from great commercial calamities, not by our own wisdom, but by the extraordinary favors of Providence. We can not count upon our follies, being always overruled by Providence, and hence, the lesson we have had, should be made profitable, by being heeded.

No nation can have unrestrained liberty; be unusually prosperous, and rapidly accumulate riches, without running into commercial excess. The result is inevitable; but as there is always a large number of sensible and intelligent people, they at least should learn, by experience, and profit by the severe lessons of the past. They should also give their experience to others, and thus make the historical lessons of the past valuable for the future.

Our text is the "Money Market," and we here say, that unless the course of Providence is widely different in the future from what we have any reason to expect, we are about entering a season of *unusual abundance of money*. The reasons for this are very obvious. In spite of our enormous overtrading and speculations, we have added to our specie fund thirty-six millions in five years. This, in itself, is of no great moment. But, it proves this, that if we did not overtrade, if our foreign commerce was conducted with prudence, in reasonable limits, we should accumulate capital at a most rapid rate. But, this period has come. By necessity our importing merchants are compelled to abstain for the time being. Our importations are reduced; our gold is increasing. Not only is this the case, in the United States, but all over the world. The result is, that in the great reservoirs—banks, capitalists, and merchants, money and solid capital are rapidly augmenting. The reservoirs are full; and the next thing is to find employment for it. If monied men are timid (as they are), so on the other hand, they have an instinctive desire to employ their capital. Unemployed capital is unprofitable. Sooner or later this unemployed money must find use for itself. In all the large towns of the United States, there are at this moment large amounts of money, seeking investment. Even in Cincinnati,

there is now, a large supply of capital comparatively idle, which will be put to use as soon as the proprietors can find safe channels for it. The only thing which prevents its immediate employment, is the timidity of holders. Nothing has so far taken, that had the least shadow or possibility of doubt in the security. This limits the number of borrowers to a small class. But, as all mercantile business must have its hazards, this extreme caution will not prevail long. As a fact, money is abundant, and the amount of investment increases every day. The relaxation and diminution of active business reduces the opportunities for good investments, and thus the quantity will continue to increase, till commerce receives a new impetus, manufactures and the arts increase, and the country sees a new epoch. This is near at hand.

The next question is, what will be the new channels of trade and money?

This is impossible to predict. Each era has its own peculiar features of trade, as well as other things. Heretofore, *lands and banks* have been the chief objects of speculation, except from 1850 to 1855, in which railroads and railroad securities were the principal objects of financial speculation. In the coming era of commerce and speculation, the objects will be more diversified. The country has vast resources for mining and manufacturing, which are less developed than any other element of trade and commerce. To develop these railroads are also necessary, especially short lines, in mining districts, and extended ones in new States. In Ohio, Illinois, Kentucky, Missouri, Wisconsin, and Michigan, the immense mines of coal, iron, and copper will be developed; while in California, Arizona, and New Mexico, silver, gold, and copper will be the principal objects of mining enterprise. To each region of mines, there must be a railroad. Where there are main lines, there must be short branches; in the new States there must be main lines. Then we shall need in the next five years *ten thousand miles of railroad*, in addition to what we have. These mines, manufactures, and railroads will occupy more of the public mind. There will be plenty of money, and that money will be used for new enterprises. But, money will never, we think, bear so high an interest as it has done, in the past three or four years. Those who have made loans at ten per cent., may be well satisfied. The chances are, they can not do it again, for some years to come. At least, such loans will not be frequent.

☞ The receipts of the New York and Harlem Railroad Company for the month of May, 1858, are \$88,000, against \$84,332 for the same month of last year. The whole expenses of operating and maintaining the road are only \$48,000 for that month, by the economy of the present direction, which is a very great reduction of expenditure.

THE COMPETITION OF THE NEW YORK AND ERIE RAILROADS.

As a general principle, *competition* is very valuable. It profits the community, and it even profits the parties to it, by urging them to greater skill, energy and economy. But, when competition drives any commercial business into lower prices, than the business can be done for, it is injurious. No wealth can stand this in the long run, though it may succeed for a brief season.

The Fulton Steamboat Monopoly in New Jersey and New York was broken down by the successful competition of Gibbons, of Newark. He first run his boats from New York to New Brunswick for \$1.00; then for 50 cents; then for 25 cents; and to crown the whole, gave the passage free and a bottle of wine into the bargain!

The monopoly was broken up by this bold competition, and the public immensely benefited. But, this is a sort of competition that can only succeed under rare circumstances.

When competition is carried on from spiteful motives, it is apt to be disastrous. Such seems to be the case with that between the Erie and Central Roads, (N. Y.) They have put the fare down to \$5.00 between New York and Buffalo—a distance of some 450 miles. In doing this, they are unjust to the interests of their Stockholders, who own the roads, and have some right to demand that they should be conducted so as to afford a fair chance of profits. The Stockholders may say to the Directors what the frogs did to the boys, when stoned by them—"It may be fun to you, but it is death to us!"

The Erie and the Central Roads are now just about in the condition represented by the cut on the outside of the last Punch. It represents two locomotives, in the character of two animals, running a race—the engineers who ride them, intent only on victory, regard no dangers, and just as both are going over a tremendous precipice to inevitable perdition, each puts his thumb to his nose and makes the sign—"You can't come it!"

This sign will doubtless be satisfactory to the managers; but, death to the poor Stockholders.

TUBULAR RAIL.

Attention is called to the new tubular rail advertised in another column. The advantages claimed for this rail, are that the top or head of this rail being found in the *bottom* roll, and the tongue of the *top* roll working *inside* of the rail, a better weld of iron, and a greater density of particles is secured than by the old method of working T rails; while the head can be made of one solid piece fully equal to the hammered top, and of course not laminated, nor liable to crush under any ordinary amount of fair usage, while

a rail of 50 lbs. to the yard is shown to have greater strength and elasticity, with the same outside surface, than the ordinary rail of 60 lbs. to the yard.

These claims were pretty fully established by some experiments made in this city some months since, in the presence of our principal railway managers; but for the purpose of submitting to the test of actual use—the best in the world—sections of it have been laid down on the Ohio and Mississippi; Indianapolis and Cincinnati; Cin., Hamilton and Dayton; Little Miami; Dayton and Sandusky; Clev., Col. and Cincinnati; Baltimore and Ohio; Louisville and Nashville; Louisville and Frankfort; Nashville and Chattanooga, and Vermont Central; but not long enough on any of those roads to give a thorough test; yet its freedom thus far from injurious wear, gives strong assurance that the claims of the inventor will be fully realized.

So well convinced are the Legislature of Tennessee of the merits of this rail, that they have authorized companies to use it of 50 lbs. to the yard, instead of the old rail of 63 lbs. per yard, as required by law.

If the inventor, E. W. Stevens, of Cincinnati, should realize all he claims for this rail, and we can not see why he will not, he will richly deserve the thanks of all parties, for by his invention \$1,000 per mile can be saved in the construction of roads, while the expenses of repairs of rails will be greatly lessened.

MEETING OF THE DIRECTORS OF THE BALTIMORE & OHIO R. R.

At the annual meeting of the Directors of the Baltimore & Ohio Railroad quite a novel proceeding took place;—of which the example may be commended to other roads. This was the presentation of medals to the Conductors, Engineers, &c., who had deserved well of the Company. It will be recollected there was a great "strike" and violent conduct on the Baltimore Road, in which a portion of the employees conducted themselves with great courage and fidelity. The Company voted them medals, and they were duly presented. Mr. GARRETT, on the part of the Board, made a speech, of which the following was a part:

Nor is there novelty in the principle on which the Company acts in this instance. The great feature of the practical success, in the conduct of the Baltimore and Ohio Road—that which has made its service the leading school for railroad education in the United States, has been its system of *rewarding merit*—the excellent doctrine of *promotion* for meritorious service, experience, skill, and ability, as they may be developed in every grade and branch of its employment.

Thus the humblest rank may furnish the principal officers of the Company—thus, the apprentice in the machine shop, the fireman and the brakeman, may become masters and superintendents, and also fill the most important positions in the service of other roads. Strict adherence to this republican and invaluable system, will, without doubt, continue to be the inflexible policy of the Baltimore and Ohio Railroad Company.

I have now, sir, the pleasure of introducing to you, individually, those to whom these medals are to be presented, viz:

Gold Medals for Conductors—Augustus P. Shutt, John Jamison, Jr., George A. Rawlings, Sam'l Barnes, Solomon East.

Silver Medals for Conductors—George Walling, Joel Covell, Evan Dorsey, John S. Lemmon, P. T. Turfield, Joseph B. Thompson, Robert C. Hewitt, Samuel Hobbs,

Jerry Morgan, Charles Miller, Wm. H. Russell, Frank W. Messe, James Turley, John H. Kidwell, J. Edwards, H. Fournier, M. H. Pascal, J. W. Dalgarn, H. C. McA. Hester, S. Suter, Thomas Rusler, James T. Ball, Solomon Conway, William Jenkins, George Buxton, Samuel Evans, Clement Wheeler, Francis A. Berger, Marlon S. Holmes, Gibson G. Priety, George W. Stoddard.

For Brakemen—James Brown, James Spero, Jacob Harrison, E. Braun Smith, Albert Rooney, Jos. Earsora, Van Buren Blake, Thomas J. English, Geo. W. Richardson, James Hammer, Thomas Parrell.

For Engineers—James McCurdy, John Thomas Woodall, John N. Hands, Lewis A. Mitchell, Robert Davis, Henry Zepp, Lewis Crawford, Zachariah Hackett.

For Firemen—Henry J. Smith, John J. Thrift, Jos. F. Stanbury, Wm. E. Henshaw.

The revenue of the road for the month of May was reported as follows:

	Main Stem. N. W. Va. Wash. Br.
For passengers.....	\$54,497 71 \$2,474 86 \$31,588 71
For freight.....	278,086 95 23,030 60 10,773 93

\$733,684 66 \$25,505 46 \$46,562 24

Making a grand total of \$491,752 76.
Compared with the same month in 1857, these returns show the following result:

	Main stem. N. W. Va. Wash. Br.
May, 1858.....	\$333,611 66 \$25,505 46 46,562 24
" 1857.....	343,584 83 28,151 34
Increase in May, 1858, \$20,016 59.	

Showing a decrease of \$10,100 for the main stem, an increase of \$25,505 for the Parkersburg branch, an increase of \$4,111 30 for the Washington branch, and a total increase of \$20,016 59.

The financial year of the Company commences with October. A comparison of the revenue of the eight months of the present year compared with the same months of last, exhibits the following results:

	1858.	1857.
October.....	\$470,415 34	\$396,131 85
November.....	423,214 45	366,488 79
December.....	462,085 96	311,443 42
January.....	1857.	1858.
January.....	297,541 87	320,131 87
February.....	350,577 13	280,373 96
March.....	345,447 81	411,619 38
April.....	439,430 53	455,596 85
May.....	381,736 17	401,752 76

\$3,789,633 21 \$3,073,328 88
Decrease present year, \$316,304 33.

FAYETTE COUNTY.—The assessors' return for Fayette County gives the following as the result of agricultural operations in that county for 1857:

WHEAT.		CORN.	
ACRES SOWN.	BUSH. PRODUCED.	ACRES PLANTED.	BUSH. GATHERED.
1857—15,316	520,704	48,314	2,336,412
1856—10,732	151,409	42,288	2,144,867

By the above it will be seen that the wheat crop averaged nearly twenty-one bushels per acre, and the corn forty-eight and one-fourth per acre. Although the amount produced in 1857 was much larger than 1856, yet the farmer realized less money for it.

WHEAT AND CORN IN WASHINGTON COUNTY OHIO.—We copy the following from a table in the *Marrietta Intelligencer*, relative to the amounts of wheat and corn produced in the above county.

	Acres.	Bush.
Wheat, 1856,	29,717	318,606
" 1857,	35,143	513,614
Corn, 1856,	19,079	360,516
" 1857,	22,032	718,897

The increase in the number of acres of Wheat sown in 1857, compared with 1856, is 5,426; in the number of bushels raised, 195,008; increase in the number of acres of Corn planted, 3,553; in the number of bushels raised, 358,381. The whole number of acres cultivated in Corn and Wheat in 1857, exceeded by 8,979 acres the number cultivated in 1856.

The average yield of wheat in 1856 throughout the County, was 10,72-100 bushels; in 1857, it was 14,62-100 bushels.

The average yield of corn in 1856, in the county, was 18.09 bushels to the acre; in 1857, it was 31.76 bushels to the acre.

Railroads.

THE CINCINNATI, HAMILTON AND DAYTON RAILROAD.

The Eighth Annual Report of the Directors of this Company has been upon our table for some days, and we are gratified to learn from it, that notwithstanding the untoward events of the past year, the interruptions of its through connections, etc., the Company has been quite as prosperous as could have been expected; at the same time the Report shows that the Company is gradually approaching a position that will secure for the future a large and profitable business, and place its stock among the best roads in the country.

The receipts and expenditures for the past year were as follows:

Receipts from Passengers.....	\$232,596 95
" " Mails and Express.....	18,864 93
" " Freights.....	214,272 21
" " Rent of Machinery, etc.....	21,683 08

Expenses of Transportation, etc.....	\$487,421 27
Leaving for Interest, Interest on Bonds, taxes and dividends.....	\$260,763 12

The decrease in freight receipts for the year, has been:

From connecting Roads.....	\$44,849 89
" Great Miami Valley.....	9,696 90

Gain in Passengers.....	\$1,025 41
" Mails and Express.....	952 72

Showing a total decrease in Transportation receipts of.....	\$32,568 66
---	-------------

At the same time there has been a corresponding decrease in the expenses of transportation, principally since the first of January, of \$33,443 42, which reduces the apparent falling off to \$19,125 24—a very gratifying result considering the financial disasters of the past year.

The decrease in transportation receipts occurred within the past six months, and is attributed to the general stagnation of business, consequent on the financial embarrassments of the country—to the continued high stage of water in the Ohio river, and to the mild weather of the past winter, allowing the Miami Canal to be open and in use.

Notwithstanding the disadvantages against which the road has had to contend, there has been a positive increase of its passenger business, which shows conclusively that this route must become sooner or later one of the most important thoroughfares leading from Cincinnati.

The movement of passengers is as follows:

The number of Passengers carried during year ending March 31, 1858.....	370,951
The number of Passengers carried during year ending March 31, 1857.....	362,630

Showing an increase in number of..... 8,321 with a gain in receipts from passengers, mails, etc., as above, of \$1,978 13.

The earnings of the past year, after payment of transportation expenses, interest,

interest on Bonds, and taxes, have been principally applied to the

Payment of Scrip, issued in 1854, for Dividend No. 5, and due September 1, 1857, with interest.....	\$111,346 70
Construction of Ohio and Mississippi connection.....	6,687 00
Purchase of Real Estate for same.....	9,796 00
Purchase of 1st Mortgage Bonds on account of Sinking Fund.....	5,400 00

The present floating debt of the Company is.....	\$143,453 01
Its assets, available within 18 months.....	107,998 82

Leaving balance of liabilities over assets....\$ 37,454 19

At the time of the failure of the Ohio Life Insurance and Trust Company, this Company had on deposit in that institution \$69,456 00, which had been provided for the payment of Scrip due September, 1857. The amount has been amply secured, but rendered unavailable for two years from September last. It now forms the larger part of the assets named above, and is bearing an interest of seven per cent., payable semi-annually.

The following table will show at a glance the comparative business of the road for the past six years:

Years.	No. of Passengers.	Earnings.	Freight.	Mails and Express.	Total.
1852-53.....	306,438	\$91,700 93	\$122,377 95	\$ 7,714 89	\$211,793 17
1853-54.....	342,634	274,659 39	176,142 11	12,238 85	463,131 45
1854-55.....	370,189	339,915 32	211,562 79	12,112 34	453,620 46
1855-56.....	352,451	316,607 34	221,607 34	13,030 04	471,255 70
1856-57.....	362,630	271,671 54	208,819 50	16,333 85	463,736 19
1857-58.....	370,951	332,596 95	214,272 21	16,608 93	463,736 19

There has been a considerable decrease of freight receipts at the termini of the road, and an increase at the principal way stations, showing conclusively that the success of this line is not dependent upon its through business; but that its way traffic is sufficient to give it a good support. The day, however, is not distant when its through connections, will be as good as any of its competitors, and will, consequently, receive as much from that source as any of its neighbors.

The rolling stock of the Company consists of

- 22 Locomotives.
- 26 First class passenger cars.
- 2 Post-Office cars.
- 9 Baggage and Post-Office cars.
- 225 Box or Freight cars.
- 41 Platform cars.
- 21 Hog or Cattle cars.
- 61 Gravel cars.
- 12 Hand cars.

The working expenses of this road for the year was as follows:

Machine Shop.....	\$ 6,642 30
Maintenance of way.....	29,009 59
Locomotive Power.....	66,634 95
Train Expenses.....	52,868 50
Station ".....	43,541 21
Office ".....	27,306 48
Mail ".....	555 12

Total.....\$326,558 15

Or about 48½ per cent of the gross earnings—a very favorable result all things considered. The rolling stock, track, etc., are all in complete order, and can be so maintained at small expense during the present year.

The whole number of miles run by the locomotives was 314,910, at an expense of:

Repairs.....	\$19,505 26
8174 Cords wood.....	23,369 02
243½ Gallons Oil.....	2,258 32
Tallow and Packing.....	1,985 57

Total.....\$47,118 27

On the whole the condition of this road is a very favorable one, and reflects the highest credit upon its very able and competent managers, and we shall be greatly disappointed if, in a few years, it does not become one of the best paying roads in the western country.

NEW JERSEY RAILROAD.

At the annual meeting of the New Jersey Railroad Company, held at their own depot in Jersey City, June 4th, the Annual Report of the Directors was read of which the *Tribune* gives the following as the substance:

It commenced by alluding to the late financial revulsion by which, while many kindred institutions were disastrously affected, the credit and resources of this company remained unimpaired. There was also cause for congratulation in view of its firm and flourishing condition, and from the fact that nearly three millions of passengers have been added to the twenty-five millions previously transported on this road, without the loss of a single life or the fracture of a single limb.

The gross receipts the past year are about the same as the preceding, being \$911,617-25, and \$910,637 66 the year before. The expenses were \$376,866 03, being a ratio to the earnings of 41 1-3 per cent, and for the preceding year \$400,715 80, and a ratio of 44 per cent. The surplus carried to profit and loss January 1, 1858, after payment of two semi-annual dividends of 5 per cent each, it \$107,171 18, while for the year previous it was \$85,257 84. The amount of the surplus fund, after applying \$25,644 13 for relaying a portion of the road last year with new rails, is \$271,083 11.

The whole number of passengers not including commuters, was 2,238,130; and of tons of merchandise, 80,872½, against 2,278,913 passengers, and 68,688 tons the year before.

The number of miles run by the trains was 396,032, and the ratio of running expenses 92-6-10 cents a mile, against 407,632 miles, and a ratio of running expenses at the rate of 98½ cents per mile for the year preceding.

The tax and transit duties paid the State of New Jersey for 1857, amounted to \$34,225 04; the previous year they amounted to \$33,558 88. Dividends at the rate of 10 per

cent per annum, amounting to \$1,745, have, as usual, been paid to the school fund, on the stock of this company, given in payment of the States's Newark Turnpike Company.

The returns of the Treasurer for the first four months of 1858 exhibit the receipts to be \$215,590 01, while for the corresponding period in 1857, they were 238,525 41. The reduction of expenses in 1858 during the same time, compared with 1857, is \$14,500, making the diminution of net earnings \$8,435 40.

The experiments made in the use of coal show that the cost per mile is from 10 to 11 cents, or about one third less than wood.

The report acknowledges an important invention by Joseph Wood, one of their engineers, being an improvement in safety switches, which removes the liability of cars running off the track, even with the switch misplaced or removed.

The cost of the new depot and ferry buildings and all the appurtenances on both shores of the Hudson, &c., exclusive of the fee simple of the land, was \$250,227 70. Estimating the value of the land, the terminus and ferry accommodations at Jersey City and New York amount to nearly \$500,000. The report was referred to a committee who subsequently reported the following resolutions:

Resolved, That the annual report made by the Directors this day be accepted and approved.

Resolved, That we have abundant cause of gratification, that while, during the last year, so many public interests have been seriously affected by the financial revulsion, which swept over the country, this company has, happily, been entirely exempt and its strength and stability unimpaired.

Resolved, That, as stockholders of this company, we cordially and entirely approve of the policy and action of the Board of Directors, and particularly in reference to the new and elegant depot and ferry buildings which have been erected during the last year, for the better accommodation of the vast concourse of traveling and transportation passing over our route from all parts of the country.

Resolved, That our thanks are eminently due to the Board of Directors for the economy, wisdom and prudent liberality which they have evinced in conducting the affairs of the Company, and that we believe that its present great usefulness and high prosperity are mainly to be ascribed to their skillful and efficient management.

Resolved, That while we entirely confide in the sound judgement of the Directors in making such additions to their work as their augmenting business demands, we concur in the policy declared in their report that will carefully avoid such an accumulation of capital for construction as may render it difficult for the receipts to insure the continuance of a proper remuneration to the stockholders, and advise in all cases an adherence to such policy.

Resolved, That it be recommended to the Board of Directors to have the report in future printed and ready for distribution ten days before the annual meeting of the stockholders, and that it be referred to a committee of seven stockholders, in order that they may make a report thereon at the annual meeting.

On motion, the report and resolutions were adopted.

A committee from Perth Amboy was announced to be present, and upon invitation, one of them, John P. Jackson, stated that the citizens of Amboy desire to construct a railroad from that place to connect with the New Jersey Road. The distance does not exceed seven miles, and the cost would be about \$75,000. The sum of \$25,000 had already been subscribed, and they desire the aid of the New Jersey Company to assist them in the enterprise.

A Committee of Conference was appointed, who subsequently reported as follows:

The Committee, appointed to confer with the Perth Amboy and Woodbridge Railroad Committee, after hearing what they have to say, report that the matter appears to be of considerable interest to the stockholders of the New Jersey Railroad and Transportation Company, but that sufficient information has not been presented to enable said Company to come to any definite conclusion. The Committee, therefore, request that they be continued with an understanding that they are to report at the next annual meeting.

The report was adopted.

A resolution was offered and adopted for

the appointment of a Committee to report upon the propriety of removing the offices of the Company from New York to the new depot.

The inspectors reported the re-election of the old Board of Directors, as follows:

John S. Darcey, Stephen Whitney, Henry R. Remsen, Hamilton Fish, John P. Jackson, Dudley S. Gregory, John J. Chetwood, John Acken and A. O. Zabriskie.

The meeting then adjourned.

The following is an exhibit of the affairs of the Company on the 1st of January, 1858:

Capital stock.....	\$3,425,000 00
Funded debt.....	777,000 00
Bills Payable.....	11,243 63
Profit and loss.....	\$296,727 24
Less paid for:	
relay'g road.....	25,644 13—\$271,083 11
Dividend first January.....	174,250 00—4,719,176 74
Cost of the Railroad and equipments.....	3,669,017 5
Pr'ty other than the above.....	\$1,040,369 36—
Cash in bank.....	18,788 971—1,059,158 63

Total.....\$4,719,176 74

RECEIPTS AND EXPENSES FOR THE YEAR 1857.

<i>Receipts.</i>	
Passengers.....	\$666,297 63
Freight.....	85,511 49
U. S. Mail, Rents, Express Freight and other sources.....	159,808 .3
Total.....	\$911,617 25

<i>Expenses.</i>	
Maintaining railroad, bridges & buildings \$	64,563 90
Repairs of locomotives, cars & machinery.	38,331 01
Fuel—cost and labor in preparing.....	61,188 43
Operating the road and transporting passengers and freight.....	200,752 29
Office expenses, salaries and contingencies.....	9,027 40
Total.....	\$376,866 03
Interest on bonds.....	\$ 44,865 00
Transit duty on passengers and freight.....	16,800 04
Tax on capital stock.....	17,435 00
Dividends in cash, August and February.....	348,490 10
Profit and loss to surplus earnings.....	107,171 18

Total.....\$334,751 22

VERMONT AND CANADA RAILROAD.

An adjourned meeting of the stockholders of this road, was held at Northfield, Vt., on Thursday June 2d. The attendance was small.

The report of the Directors, covering the time since the annual meeting on the 28th of December, 1857, shows the financial condition of the corporation on the 31st of December as follows:—

Construction account.....	\$1,339,247 32
Suspense account.....	51 886 87
Vermont Central, rent due.....	369,961 51
Stock unissued.....	1,500 00
Cash.....	34 14
	\$1,762,629 84
Capital Stock.....	\$1,350,000 00
Dividends unpaid.....	388 00
Rent due.....	412,241 84
	\$1,762,629 84

The subject of the extension of the road into Burlington, has engaged the early and earnest attention of the Directors, and they give the opinion that a connection with Burlington (provided it can be obtained within the limits of suitable cost) is for the interest of the corporation.

The statement of the financial condition as reported by the late board in December last, showed a net indebtedness Nov. 1, 1857, of \$61,904 32. The gross earnings for the months of November, December, January, February, and March, amount to \$236,999 80, and the expenses to \$202,325 33, leaving a balance of \$34,674 47. The indebtedness has been reduced by this amount, and on the 1st of April was only \$27,229 85.

The report closes as follows:—

"It may not be wise to estimate that the gross income of the road will be as large this

year as the last, as a general falling off of business is apparent upon all railroad lines, and on the other hand the expenses may be diminished as the ratio of expense to the gross receipts seems from the accounts to be much larger than the average of the railroads throughout this section of the country."

The proposed connection with Burlington, alluded to in the reports, elicited some discussion, and the following resolution, offered by Mr. Rice of Boston, was adopted:—

Resolved, That the Directors be authorized to apply to the legislature for such legislation respecting the connection of the Vermont and Canada Railroad with Burlington, as they may think necessary.

In regard to the concluding paragraph of the report, Mr. Dexter of Boston, thought that the comparison of per centage of expenses to the receipts was an erroneous mode of determining the economy of running a road, and that the true test was was the expense of running a train. He had been asked why the Northern (N. H.) road could be making dividends and the Central not. He had obtained statistics which enabled him to present to the stockholders a comparison of the two roads made up from the same date. For 3½ years, the Northern railroad received per mile run, an average of \$1459, while the Central received an average of \$1205, a difference of \$254. For the year 1857, the profit of the Central was \$160,570 92. If the Central had earned for that year as much per mile as the Northern, the difference, 254, computed on 630,228 miles run, would have given the Central the additional profit of \$160,077 91 making a total of \$320,658 83, which would have been the Central's earning for that year; or in other words, if the Central could have obtained as much for the work they did as the Northern received, the net profit would have been nearly doubled.

Considerable discussion followed, on this and other subjects, but no decisive action was taken.

RAILWAY MATTERS.

THE CHICAGO AND PLAINFIELD RAILROAD.

To the Editors of the Chicago Daily Press.

The construction of a railroad from Chicago through Plainfield to Lisbon, in Kendall County, with a view to a future connection with other roads in course of construction from the southwest, is an undertaking daily gaining the confidence of the public, and deserving particular attention. In order, however, duly to appreciate its importance and the certainty of success, as another great avenue through which new sources of wealth are eventually to be poured into Chicago, the plan for its construction must be thoroughly understood as well as the superior advantages the country possesses by its remarkably level surface and the extensive resources of a thickly settled and fertile agricultural district through which the line is located. The plan for construction is to adapt it strictly to the business designed to be accomplished, and to adhere to those great principles of economy which insure success in all other undertakings. The present railroad system unfortunately labors under the consequences of great mechanical errors and unparalleled extravagance in the expenditures incurred for construction and operation. It is not necessary in connection with this subject, to trace out the causes for these evils; that they do exist, to a disastrous extent, is pretty generally admitted, and

they are merely referred to in order to point out and illustrate the practicability of rendering railroads more profitable in future. The first consideration is in reference to the capacity of railroads. A locomotive draws its load by the adhesion of its driving wheels to the rails. This adhesion is in direct proportion to the weight resting upon them, and although estimated higher, may be safely considered as equal to twenty five per cent. of the weight resting upon them; that is to say, that a force equal to twenty-five per cent. of the weight resting upon the driving wheels will not quite cause them to slip, but will propel a load corresponding to the force applied. It is ascertained that a force equal to six lbs. will move a load of one ton upon a railroad, consequently a locomotive of six tons, or one ton and a half resting on each of its driving wheels, has an adhesion of 3,000 lbs., which is sufficient to propel as many tons as there are sixes in 3,000, i. e. 500 tons. Allowing one-third of the gross load for the weight of the cars, 332 tons of freight can be hauled by such an engine on a level railroad. The average cost of running a train on railroads which cost from twenty-five to thirty thousand dollars per mile and furnished with heavy engines to surmount high grades (and sometimes to meet the mistaken notions of Railroad Companies,) in the adoption of high rates of speed, is estimated at about one dollar per mile. The line of a railroad from Lisbon to Chicago would be equivalent to a perfect level; it will be cheaply built and worked with a light rolling stock, hence the cost of running a train would not exceed 60 cents per mile. It has been shown that a six ton engine, with small driving wheels and sufficient boiler, can haul 332 tons of freight on a level railroad. It would therefore haul at one load from Lisbon to Chicago 11,288 of wheat. Such a load, however, would be seldom on hand, and so large a train is always inconvenient. It would be a safe basis for calculating the cost of transportation to assume one-third of this amount as the usual load, or fourteen cars carrying freight equal to 3,761 bushels of wheat at 60 cents per mile for running expenses from Lisbon to Chicago, would amount to \$33; add for station expenses, including loading and unloading at 5-8 of a cent per bushel, and the total cost would be \$36.50, or 1½ cents per bushel. The same load would cost more per mile from stations nearer Chicago, because the handling, booking, &c., would be the same. From Plainfield the running expenses would only be \$22.20, handling, &c., \$23.50, total \$45.70, or nearly 1¼ cents per bushel, whereas the proportion of 55 to 37 would only give a little over 8 mills per bushel. A freight tariff of 4 cents per bushel from Lisbon would leave a profit of 2½ cents, and must be 3½ at Plainfield (two-thirds of the way) to leave the same profit. Whether the Chicago and Plainfield Railroad Association will be able to put their charges thus low, must depend upon the first cost of their road and the amount of business to be done. The Chicago and Galena U. R. R. Company, who transport on 55 miles of their road an amount of freight equal to 3,200,000 bushels of wheat, make an average charge of 6 cents per bushel. Their freight engines weigh from 28 to 30 tons, with 3½ tons on each driving wheel. These are capable of drawing 93 cars, or 13,296 bushels of wheat on a level track. Assuming, as before, one-third as the average load at a cost of \$1 per mile, the expense for

55 miles is 1 27-100 per cent a bushel. The Erie Railroad Company, having a railroad near 500 miles in length, with grades of sixty feet to the mile, have engines of 30 tons which have hauled a hundred cars over the level parts of their road, containing 1,176 tons of freight, equal to 37,934 bushels of wheat. Such, however, is the irregularity of their road, and the excess of Eastern freight over Western, (it being 77 per cent to 23,) that their average useful load, is only 90 tons, drawn over 177 miles—or 1 34-100 cents per ton per mile going eastward, and 3 97-100 cents going westward. Their charges were 2 37-100 per ton per mile, or 4 cents for a bushel of wheat hauled 55 miles, (the distance from Lisbon to Chicago,) their profits being a little over two cents per bushel. The trade from Chicago into the interior is nearly equal in eastern and western directions, hence the success of the Galena road, with grades of only 25 feet to the mile. The same advantage, only in a higher degree, would exist between Lisbon and Chicago, because the line is equivalent to a level—which is at least 25 per cent. better than the Galena road.

It is difficult to estimate accurately the amount of business which will be done between Chicago and Lisbon, but in comparing it with that portion of the Galena Railroad which lies between Chicago and Huntley, an approximate estimate may be made which cannot vary much from the true result. By the annual report of that Company for 1857, the amount of all the way freight, for 55 miles to and from Chicago, was equal to about 1,800,000 bushels of wheat—carried the average distance of 32 miles—which, at the rate of profit, 2½ cents out of the 4 cents proposed as a suitable charge, would amount to \$45,000. In relation to passengers, the number between Chicago and Huntley for eight months in 1857, amounted to about 86,000 (independently of the through travel to Galena or elsewhere. At the same rate, for 12 months the number would be 129,000. There seems to be no reason why a similar number would not travel on the Chicago and Plainfield road. A large portion of these, however, stopped at way stations, so that the fare on the 55 miles should be charged to only half the number, (64,500) as traveling 37 miles, or from Plainfield to Chicago, who would pay two cents per mile or 75 cents each. The expense of running these light trains (every contingency included) would not exceed \$66 a trip—64,500 passengers at 75 cents each, would pay \$48,375; deduct the cost of 313 trips at 66 each, or \$20,658, and the net profit would be \$27,717, which added to \$45,000 derived from freight, would constitute \$72,717—the whole net revenue of the railroad from Chicago to Lisbon, or nearly nineteen per cent. on \$7,000 per mile, the cost of road and rolling stock.*

*The first cost of the Galena Road, as far as Elgin, where the cost of grading was at least a thousand dollars a mile more than the estimated cost of the proposed line, was a little over \$8,000 per mile, and annual dividends were paid of 15 per cent. The fare from Lisbon to Chicago would be \$1-10.

R. P. Morgan.

ALBANY AND SUSQUEHANNA R. R.—Contracts for the completion of the Albany and Susquehanna Railroad have all been awarded. The arrearages of the first three instalments and a fourth instalment of 10 per cent are to be paid on the 20th inst.

MINERAL CHARCOAL, OR CHARRED COAL.

The account of this material, and of its applicability as a substitute for wood charcoal, can not fail to excite the attention of all connected with the iron industry of this country, and interested in its progress. From the statements made at the recent meeting of the South Wales Institute of Engineers, and published in last week's *Chronicle*, it would appear that this fuel is free from sulphur, even though made from coal containing a considerable amount of that objectionable substance. The testimony of Mr. Banks and Mr. Thomas, that with this charred coal, tin plates may be prepared as good as with wood charcoal, fully justify this conclusion.

The separation of the sulphur by means of the action of water upon the red hot material, just as it is drawn from the furnace, is in all probability very much facilitated by the mechanical state of the charred mass. In the ordinary production of coke this mode of separating sulphur is had recourse to with good effect to some extent, but the compact character of the product is a great obstacle to complete desulphurisation in this way. The case would be different with the charred coal, every part of which would be brought in contact with the water, so as to allow of the reaction between it and the sulphuret of iron disseminated through the fuel taking place in every part of the mass. There is, therefore, good reason to expect that this method of producing fuel, suitable for certain operations connected with iron working, will be found to furnish important results. Hitherto it seems that the charred coal has been used only in the refining of iron for the production of tin plates, but there is every probability that its use may be extended to other operations besides this, provided corresponding modifications in the mode of working are adopted.

Heretofore there have already from time to time been a number of plans proposed for effecting the desulphurisation of coal and coke, but most of them are too costly to be generally adopted. The problem still remains to be solved, and is probably of greater importance in its bearing upon the iron industry of this country, than any other question connected with the same subject. For this reason it will be worth while to direct attention to a method that has quite recently been proposed for effecting this object, by a German manufacturer, Dr. Bleibtreu, of Bonn. This method is remarkable for its simplicity and cheapness, and if it should prove to be as efficacious in practice as it is correct in theory, the result will be as valuable for iron industry generally as the production of a substitute for wood charcoal will be for certain branches of iron industry in this country.

Dr. Bleibtreu's method consists in reducing the coal to a state of fine division, and then mixing it with powdered limestone, chalk, burnt lime, or other calcareous substance. The mixture is then coked in the manner usually adopted on the Continent for coking small coal, and the product, which is called "lime coke," may be employed for any metallurgical purpose. In this mode of preparing coke the pyrites of the coal will be decomposed in the same manner as in the ordinary coking operation—that is to say, one-half of the sulphur will be expelled in the gaseous state, and the other half will remain combined with the iron as proto sulphuret. This is not decomposed by heat, and is the chief source of the difficulty of desulphurizing fuel.

While the decomposition of the pyrites is going on, the carbonate of lime is converted into quick lime, and this substance being intimately mixed with the fuel reacts upon the proto sulphuret of iron in such a manner as to produce oxide of iron and sulphuret of calcium. This sulphuret of calcium is decomposed by water with evolution of sulphuretted hydrogen, so that by sprinkling the red hot coke with water when it is drawn from the furnace a further quantity of sulphur is separated from it.

There is also another way in which advantages would probably be gained by using the "lime coke" in iron smelting. This consists in preventing the sulphuret of iron from entering into combination with, and contaminating the iron during its reduction from the ore in the blast furnace. Under the system generally adopted of charging the ore and limestone alternately with coke, the contact between these two latter substances is not at all intimate. The consequence is, that the influence of the lime in preventing the sulphur of the coke being absorbed by the reduced iron is very much less than it otherwise would be. But, notwithstanding this difficulty, experience has shown that an increase in the proportion of limestone in the charge of a furnace worked with sulphury coke is attended with a reduction in the amount of sulphur in the metal produced.

The conditions prevailing in the upper parts of such a blast furnace may be represented thus. At one place a lump of reduced iron ore or spongy metal may happen to be in contact with coke only, and as the charge descends in the furnace and the coke is consumed, the proto sulphuret it contains is gradually separated as a fixed residue in contact with the spongy iron. Owing to the fusibility of this sulphuret it melts long before the iron, and is consequently sucked up by the sponge, which, melting at a lower part of the furnace, thus becomes contaminated with sulphur. In addition to this, the ash of the coke also remains as the combustion proceeds, and as this ash is not readily fusible without the addition of some flux, "scaffolding" may be produced, which seriously disturbs the working of the furnace. On the contrary, supposing that the coke during its combustion is chiefly in direct contact with limestone, and not with the spongy iron produced by the action of the reducing gases upon the ore, the consequences will then be very different. As the carbon of the coke burns away, leaving its ash and the proto sulphuret of iron in contact with the quick lime, chemical action takes place between it and both of the above substances. Acting the part of a flux to the ash of the coke it combines with it, producing a readily fusible slag, and thus counteracts the tendency to "scaffolding." Reacting with the proto sulphuret of iron before this has an opportunity of coming in contact with the spongy iron, it gives rise to the production of sulphuret of calcium, which is dissolved by the slag resulting from the ash of the coke. By this means the contamination of the iron with sulphur is prevented, for as those portions of the charge where these changes have taken place sink down towards the zone of fusion, and the iron is melted as well as the other ingredients of the charge, the difference between the density of the metal and that of the slag at once determines their separation; and thus the contamination of the metal with sulphur can not take place, because the condition of intimate contact between the metal

and the sulphury slag, which is indispensable for the transfer of the sulphur to the iron, is thus rendered impossible.

But in the ordinary manner of charging blast furnaces, even when an increased proportion of limestone is used, the prevalence of one or other of the conditions above described is merely a matter of chance. Dr. Bleibtreu's method of preparing coke is, therefore, intended to reduce this chance to certainty, by adopting such arrangements as will admit of the protective influence of lime being exercised throughout the entire mass of the charge at that time when it is capable of being most efficacious in producing the desired result. By the intimate admixture of the lime with coke, it is enabled to seize upon the proto sulphuret of iron and ash, the moment they are separated by the combustion of the carbon, and to render them harmless during the subsequent stages of the smelting operations.

The proportion of lime stone to be mixed with the coal previous to its being coked will, of course, depend upon the amount of sulphur and of ash that it contains. This must be determined by analysis, and then, for each hundredth of sulphur, three hundredths of limestone should be added, and for the ash a quantity equal in weight to itself.

Dr. Bleibtreu is of opinion that the use of this prepared coke would also tend very materially toward reducing the amount of silicium and aluminium in the pig iron obtained; for there is much reason to believe that those substances, so objectionable in the subsequent operation of converting pig iron into malleable iron, are chiefly introduced into the metal while it is in a spongy state in contact with the ciliceous and aluminous ash of the fuel, under the influence of the powerful reducing conditions that prevail in the upper portion of a blast furnace.

Altogether, this method is one which is eminently deserving of attentive consideration and full trial, for, as we before remarked, it relates to one of the most important questions connected with iron smelting; and in simplicity, cheapness, and probability of success, it is very much in advance of anything of the kind that has yet been proposed.—*American Mining Chronicle*.

The value of a Mercantile Steam Marine, to the commerce and general prosperity of a country in time of peace, is sufficiently well known not to need any arguments to prove it, and its necessity in time of war, has been amply illustrated by the magnitude and utility of the services rendered by the Cunard and other Mail Steamships of Great Britain to the allies during the war in the East.

The importance which steam is acquiring as a motive power in the commercial marine of England is shown by the statistics of shipping for the year 1856, just completed. There entered from foreign ports:

	Number.	Tonnage.
British sailing vessels.....	13,611	2,559,769
" steamers.....	4,278	1,517,973
ENTERED COASTWISE:		
British sailing vessels.....	93,328	7,253,608
" steamers.....	13,143	3,045,612

Senator Collamer, formerly Postmaster General, used these words in the United States Senate on the 3d March, 1857: "One of two things must happen: Great Britain must monopolize all the valuable commerce of the world, or we must go on with this system, for individual enterprise can not by any possibility compete with her."

OPENING OF THE NEW DEPOT AT JERSEY CITY.—The new Depot at Jersey City, constructed by the New Jersey Railroad and Transportation Company, was formally opened yesterday afternoon by a dinner. About six hundred persons, composed of stockholders, city officials of Jersey City, Newark, New Brunswick, and others, assembled on the first floor of the Depot for the social entertainment. Ex-Gov. Pennington presided. The edibles received due attention, and if there was a lack of Passaic, its place was amply supplied with the product of the vineyard. The toasts were announced by Ex-Gov. Pennington.

Short speeches were made by ex-Gov. Pennington, Gen. John S. Dacey, President of the road, John P. Jackson, Vice President, Superintendent Tallmadge of New York, Mayor Gregory of Jersey City, Judge Naar of Trenton, Edw. Vail of New Brunswick, Dr. Obkley and L. H. Higgins of Elizabeth, Mayor E. Y. Rodgers of Rahway, the Hon. Ephraim Marsh, President of the Morris Canal Company, Job Mail, architect of the new depot, and others.

The company dispersed about 5 o'clock, apparently in the best humor with themselves and the rest of mankind.

The new depot, (a full description of which has before been published), is 500 feet long by 103 feet wide. Over the water 180 feet is constructed of wood, and the remainder of brick. The front on Hudson street is 125 feet in width, and is surmounted by two towers; the second story is fitted up for offices. The roof is 43 feet high, exclusive of the cupola, which runs the entire length of the building, and is used for the purpose of light and ventilation. The roof is constructed of corrugated galvanized iron, constructed in the form of an arch, without any central support. Running parallel with the second story offices, is a corridor, 800 feet in length, extending around the building. Five tracks have been constructed for the entrance of trains, so that passengers pass directly from the cars on board the ferry-boats. The building is very elegant, light and airy, and is one of the best for the purpose in the United States.—*N. Y. Tribune*.

The Memphis and Ohio Railroad will be completed from Memphis to the Mobile and Ohio Railroad and the cars be running by the first day of next November, from Memphis to Cairo. The connection between New Orleans and Memphis will be made on or before the same date, by the completion of the New Orleans and Jackson Railroad to Grenada on the Mississippi Central, and by the Mississippi and Tennessee Railroad from Grenada to Memphis. The work on the Mississippi, and Jackson, Tennessee, before next December. If no disappointment in these calculations, shall occur, the city of New Orleans will be, by next autumn, in possession of a chain of railroad routes to the North and East by the way of Jackson, Mississippi, Memphis and the Mobile road, to Cairo, and all the roads that branch from that point, by the way of Jackson, Mississippi, to the Mobile road, to the same point, by the way of Jackson, Mississippi, Lagrange, Tennessee, and the Charleston road, and by way of Jackson, Mississippi, the Memphis and Charleston road, and the East Tennessee road to Richmond, Washington City and New York.

Lightning trains will then reduce the time between New Orleans and New York to three days, or four days, if ordinary passenger trains only be run.—*Peter. Dec.*

The following are the receipts of the Michigan Southern Road for the third week in May, and for the entire month in 1857 and 1858:

	1857.	1858.	Decrease.
Third week in May.....	\$ 53,578	\$ 43,498	\$ 10,080
For the entire month....	192,899	147,762	45,137

CULTURE OF THE VINE IN THE E. W. ALLEGHANIES.*—No. 1.

DAVID CHRISTY.

General remarks on Wine and its Production—Points to be investigated—Grape rot in Europe—Theories on the subject—American Vines in Europe—Remarks on the subject—American Vines in the United States—American Whisky substituted for the Juice of the Grape—Revival of the European Vines—America disproving the Theory referred to—Opinions on the Subject—The Discussion to be continued.

The culture of the Grape and the manufacture of Wine, in all ages, have been objects of much economical value among enlightened nations. With the advance of civilization they have lost nothing of their interest, but, on the contrary, are rapidly growing in importance. This is evident from the fact that the production of wine now falls far below the demand; so far, indeed, that adulterated and spurious wines are sold, to an enormous extent, in all markets where the population care not to discriminate between the counterfeit and the genuine. But there is a superadded necessity, beyond that of the mere increasing demand for wine, that, in the opinion of many, calls for its extended production. Legislation has proved itself impotent in the suppression of the curse of intemperance. The people at large are unwilling to tolerate any legal interference with their facturers of the common drinks of the country, freedom in the use of beverages. The man it is charged, have less regard for the public health than for their own private gains. The deleterious compounds, passed off for wines and brandies, or other popular liquors, it is believed, tend to fire the brain, and produce morbid conditions of appetite which greatly aggravate the mania for intoxicating drinks. Nor is it strange that the avarice of men should tempt them to the adulteration of the common beverages of the people. It is in proof that the ordinary drugs of the apothecary, indispensable to the preservation of life, are now largely adulterated by miscreants whose cupidity would lead them to highway robbery, were their lives as free from danger in that pursuit as in the secret chambers of their laboratories.

*The articles herewith given to the public, were prepared under the following circumstances:—As geologist of the Nantahala and Tuckasee Land and Mineral Company, of North Carolina, I had to prepare a report on the mineral prospects of the property of the company, and the value of their lands for pasture and grape culture. The latter division of the subject demanded more extended details than would be appropriate for the report of the company—hence the articles are used only as an appendix to it.

Another motive for adopting this plan, has been to furnish information to other parties who had desired me to communicate the information, in my possession, upon these subjects. The convention of the Greenville and French Broad Railroad Company, which met at Asheville, North Carolina, in August, 1857, appointed me on a committee to report, among other things, upon the agricultural, manufacturing, and mineralogical resources of North Carolina. As I could only report upon the points upon which information had already been collected, the following articles are intended as a response to that appointment—the additional topics contemplated being left for the other members of the committee. I could only confer with two or three of its members, as the post office address of the others were unknown to me.

Another motive for the adoption of this plan exists in the fact, that the Southern Commercial Convention at Knoxville, Tennessee, in 1857, also appointed me on a committee to report on the cultivation of the Grape in North Carolina; but as the official notice of my appointment never reached me, I could not, with propriety, forward a formal report to the Convention of the present year—hence this informal mode has been adopted to meet that case.

The bearings of all the articles will be seen at once by the reader, except that on "Fog and Rain in the Mountains." The facts which it embraces are important, as showing why it is that the mountain streams of North Carolina are so well sustained during summer, and why its highlands will thus be more valuable for pasture than those sections of country where the springs cease to flow in the months of summer and autumn.

It can not be denied that intemperance is on the increase. The manufacture of ardent spirits, for the last few years, has vastly increased; and there seems to be no probability, under present circumstances, that its use can be diminished. The belief is gaining ground that an ample supply of the pure juice of the Grape would displace the noxious beverages now on sale, and greatly promote the cause of temperance. It is also believed that it is no longer safe to administer the common wines and brandies in those classes of diseases where atebolic remedies are indispensable. Hence there is a double motive prompting to effort for the production of pure wine—temperance and health being both involved in the issue. The present practice of many physicians is to prescribe whisky, as the safest of all drinks, to those who can not purchase pure brandies or wines at their present costly rates; but this is to encourage the consumption of that article among the class of persons most likely to fall into the excessive use of cheap liquors, and to sanction the employment of a remedy far inferior to pure wine.

Whether, then, the subject is considered in its bearings upon temperance or health, there is an urgent necessity, in the opinion of many, for an extended cultivation of the Grape. Under these circumstances, it is apparent that any country, adapted to the growth of the vine, must find it very remunerative to engage vigorously in its production.

It may be well here to remark, that the writer disapproves of the use of wines, or other intoxicating drinks, except for medical purposes, and that he can not judge of the quality of American wines as compared with those of Europe. This point, therefore, must be left to others, and his investigations limited to such questions as are connected with temperature, humidity, soils, the geology of the districts coming under consideration, and the information needed as to the conditions under which the best wines of Europe are produced.

To gain a correct view of the causes which have recently called public attention to the necessity for extended grape culture in the United States, it is necessary to refer to its condition in other countries, as well as to the results of the diminution of the production of wine in Europe.

For several years past the discouragement to European vine dressers have been very serious. *Mildew* and *grape-rot* extensively affected their grapes, and even the vines themselves suffered from decay. These results led some to adopt the opinion that the vitality of their vines was involved, and that their extinction was not at all improbable. This view was based upon the theory of certain naturalists, who hold that each separate individual, of any vegetable species, possesses a vitality, when produced from the *seed*, which gives it a duration of existence equal to the first created individual of the species; but that the *buds* or *branches*, used either as grafts or for independent growth, can have no longer duration of life than if they had remained upon the parent plant. That is to say, the propagation from *cuttings* differ from the propagation from *seed* in this respect; each plant produced from *cuttings* must cease to live when the original plant, from which the first cutting was taken, has fulfilled its allotted period of existence; but each plant derived from *seed* has an independent vitality, giving it an existence co-extensive with the age allotted to the first one of the species to

which it belongs. The term, *plant*, is here used in its botanical sense, as representing the whole vegetable kingdom.

The vine has been propagated from cuttings for many thousands of years in Europe. The advocates of the foregoing theory, therefore, on witnessing the general decline of the fruitfulness of the vine upon that continent, for the past few years, concluded that its vitality had become exhausted, and that its destruction was at hand. To remedy the threatened evil, measures were adopted to secure cuttings from the youthful vines of the United States, or elsewhere, to enable the vintners to commence a new career of another two or three thousand years. Such has been the importance attached to this subject, and such the bearings of the production of wine upon the public prosperity, that even the crowned heads have interposed to aid in testing the adaptation of the native grapes of North Carolina to the climate and soils of their domains. The Catawba and Isabella are now growing in Royal Vineyards; and should the experiment prove successful, these vines will, if necessary, be made to replace the effete European varieties.

Were the diminished supply of pure wine the only result of the late failure of the vintages of Europe, the loss would not be a subject of much regret, except as it affected the poor whose labor was devoted to its production. Men in health have little need of stimulants beyond what their tea and coffee and ordinary food afford. But the use of wine having become general, for ages, both as a beverage and for medical purposes, the demand has not lessened with the diminished production. To supply this demand spurious wines have been thrown upon the market, and accepted by the greater part of consumers as genuine. The extent of this adulteration can not be determined, but, according to the best authorities it has been enormous. The amount imported into the United States, for 1855 and 1856, was valued at \$6,272,770, being at the rate of more than three millions of dollars worth per annum. Of these imports it is believed that very little consisted of pure wines; and the amount of spurious wines manufactured in the United States must have been still greater than that imported. French Brandies, also, have diminished with the lessened quantity of wine from which they are produced, and American corn whisky has been largely exported to enable the French distillers to supply the lack of the pure article by those of a counterfeit character.†

But the events of the year 1857, together with the history of American grape culture, cast much doubt upon the theory of diminishing vitality in the vine, as a cause of failure in the European vintages. The grape crop in Europe, for 1857, has been an abundant one in many districts. This fact seems to indicate, with certainty, that the vines have recovered their former healthful condition. The American Catawba grape, has been affected, occasionally, by *mildew* and *rot* during nearly the whole period of its cultivation; and, in the last year, especially, the crop was very materially injured throughout Ohio, Kentucky and the west generally. The fact that the Catawba has been so seriously affected by the grape disease, though not yet twenty years from the native forests of North Carolina, casts an additional doubt upon the the-

† See Annual Statement of Trade and Commerce Cincinnati, for 1857.

cuttings, as the cause of failure in the vintage of lost vitality, from long production by ages of Europe, and demands that investigations shall be conducted in another direction.

The conclusion to which the best vintners are led, after a careful review of the whole question, is, that the grape disease, common to both Europe and America, will be of only occasional recurrence, like the *smut* and *rust* in wheat, the *potato rot*, or epidemics among men; and that while its prevalence in some districts may be too frequent to allow of the continued profitable culture of the vine, in others it may be no more fatal than frosts are to the peach and the apple. But could there be a section of country discovered, having a chemical composition of soil, or an altitude above the valleys, which would yield wines of fine flavor and be exempt from the grape disease, its productiveness of wealth would far surpass every other district devoted to ordinary agriculture. Such a region would be a desideratum to the nation, and it is believed that it has been discovered. The facts from which such an opinion is formed, will be given in the next chapter.

SALE OF THE SOUTHERN PACIFIC R.R.

No Injunction Obtained!

A NEW COMPANY ORGANIZED.

From the N. O. Crescent, 10th.

From the Marshall (Texas) Flag of the 5th inst., we glean the particulars of the sale of the Southern Pacific Railroad, consisting of the twenty miles in running order, iron, cars, track, appurtenances, and all other property belonging thereunto, together with the rights and franchises appertaining to the old company. The sale took place on Tuesday, 2d inst., under the deed of trust executed some time last summer; and after some little bidding, the whole of this vast property, estimated by hundreds of intelligent men to be worth fully one hundred millions of dollars, was knocked off to Dr. J. M. Saunders, of Harrison county, for the sum of forty thousand dollars!

Speaking of the road, sale and matters connected therewith, our Texas cotemporary jubilates in this wise, and who can blame him? "As to the triumphant success of this enterprise, with proper management, no reasonable man can entertain a solitary doubt;" and that, "whatever conflicting opinions may prevail, we (the editors of the Flag) nevertheless believe the enterprise to be in a better condition than it ever was at any former period."

It is now, in fact, a Texan enterprise—its abode is required to be in Texas—the President, and the balance of power in the Directory, are also required to be in Texas. The money-mongers of Wall street, New York, no longer have the power to control an enterprise which is destined to be the great thoroughfare from ocean to ocean, but which, if built at all, must be built by the money attained by the sale or hypothecation of Texas lands, or that drawn from her Treasury. If there be a hundred million of dollars in the part of the Southern Pacific Railroad within the limits of Texas, all of which alone depends upon Texas soil and Texas money for its construction, to whom should it belong but Texans? Will any one say the financial Shylocks of New York, to say nothing of smaller intermediate cities?

In continuation we copy the following proceedings from the *Flag*:

MEETING OF THE PURCHASERS OF THE S. P. R. R.—Present: L. T. Wigfall, L. V. Grant, Dr. James L. Grant, W. T. Scott, M.

J. Hall, Geo. C. Lawrason, W. R. D. Ward, H. Wickland, Dr. J. M. Davidson, Dr. Jos. Taylor, Dr. H. S. Perry, E. Geer, E. A. Blanche, Dr. Roberts, J. F. Smith, A. M. Burnham, Thomas Swanson, and Benjamin Long.

On motion, L. T. Wigfall was called to the Chair, and George C. Lawrason appointed Secretary.

On motion, the following resolution was adopted unanimously:

Resolved, That the purchasers of the Southern Pacific Railroad from Dr. J. M. Saunders, now organize themselves into a Stock Company under the law of this State, approved 29th of December, 1857.

And here follows a list of the officers elected:

L. P. Grant, President; Benjamin Long, Vice President; E. A. Blanche, Chief Engineer; W. R. D. Ward, Secretary and Treasurer; J. P. Henderson, G. B. Adkins, W. T. Scott, J. M. Saunders, Benj. Long, L. T. Wigfall, Directors.

An injunction had been sued out against the purchasers, but as a bond of \$500,000 was required to give it force, and as that bond had not been given up to the latest dates, we opine it will not amount to much.

We have now given everything material we could gather from the Flag, and wish our Texas friends much success, even if that success be founded upon the losses of our own people.

MONETARY AND COMMERCIAL.

No material change has taken place in the money market since our last issue. Owing to the unpropitious weather for some time past previous to last Sunday, there has been some little disposition to speculate in produce and whisky; which has produced a slightly increased demand for money, the supply of capital, however, is large, and there is consequently an inquiry for prime paper in excess of the offerings. Rates may be quoted at eight to twelve per cent. There has been a good deal of croaking by parties interested and uninterested relative to the growing crops. The truth is, as we intimated some two weeks ago, that there is every indication of a good crop throughout the entire country. The heavy rains of the past month will interfere with the crops on the bottom lands, but hope need not be lost even as to those.

The wheat at the south has been already harvested, and is a good yield. In our own neighborhood it is in full head, and never looked better. There is a large breadth of all kinds of grain sown, which, with the large surplus of last year, will make breadstuffs cheap, even if there should be a total failure of the corn crop on the bottoms.

Farmers are, however, making inquiries for the early varieties of New York and Canada, and should the present promising weather continue, we may still have a full average crop even of corn.

The Cincinnati Price Current says:

Impressions of the new counterfeit of the denomination of ten dollars on the State Bank of Ohio, the issue of which has heretofore been noticed, were quite freely circulated on Third street Monday and yesterday. This is pronounced by experienced and competent judges the best executed and most dangerous counterfeit now in circulation. It is almost an exact imitation of the genuine, and even bank tellers have been deceived by it. It was taken on deposit at one of our leading banking houses on Monday. The shading of the line "State Bank of Ohio," is slightly darker in the counterfeit than in the genuine bill; and the name of the President is rather more regularly written in the former than in the latter.

In the counterfeit, the letters of the President's name are rounded off rather more carefully than in the genuine, and the main lines are heavier in the latter than in the former; but these differences are so slight, that ordinary judges would not notice them. People who are not experts, would not be safe in taking bills of this denomination on any of the branches of the State Bank of Ohio. The country will undoubtedly be flooded with them. Several have been sent here already, from New York, where they were received as genuine. *Refuse*

all notes of ten dollars on the branches of the State Bank of Ohio. The plates of this Bank, from one dollar up to twenty, have now been counterfeited, and in all cases, the spurious engravings have been well executed.

The managers of the Bank, therefore, owe it to the public, to get up a new set of plates.—Those now in use never have been creditable to the Bank, and there is nothing connected with them, except the slight expense that their destruction would involve, to induce the Bank to continue to use them.

Relative to American securities, E. F. Satterthwaite, of London, in his Circular of May 28, says:

There has been a moderate business in American Railroad Securities; the market, though cleared of several parcels of Bonds, is not buoyant at the close. Several lots of Erie 1853 Bonds have been taken for investment from 71 to 72. Pennsylvania Central 1st mortgage have been wanted at 90. The 2d Mortgage Sterling are offered at 86½.

In Illinois Shares considerable transactions have taken place at lower rates, the disposition being to effect sales.

Construction 7 per cent. Bonds are in fair demand at 82 to 82½, but the 6 per cent. and Freedlands are dull at 80 to 81.

The British Royal Mint has shipped to Canada £60,000 of the new decimal coinage, as follows:

In 29 cent pieces.....	£20,000
In 10 cent pieces.....	15,000
In 5 cent pieces.....	15,000
In bronze cents.....	10,000

The receipts at tide water of Flour, Wheat, Corn and Barley, for the 1st week of June, 1857 and 1858, have been as follows:

	Flour, bbls.	Wheat, bu.	Corn, bu.	Bar. bu.
1857.....	28,181	143,545	8,773	11,961
1858.....	77,352	397,580	193,160	28,457
Inc....	49,169	254,035	184,387	26,556

The following is a comparative statement of Foreign Imports for the week, and since Jan. 1:

	For the week.	1856.	1857.	1858.
Dry goods.....	\$1,124,290	\$ 824,775	\$ 497,753	
General Merchandise.	2,897,985	2,776,194	1,791,136	

Total for the week....	\$4,022,275	\$3,659,969	\$2,288,889	
Total for five months.	89,872,344	100,608,190	49,991,961	

Since Jan. 1.....\$94,895,119 104,268,159 \$52,280,850

The following is a comparative statement of the exports—exclusive of specie—from New York to foreign ports for the week and since Jan. 1:

	1856.	1857.	1858.
Total for the week..	\$ 1,608,969	\$ 1,139,714	\$ 1,224,175
Previously reported.	27,109,981	28,562,815	22,416,179

Since Jan. 1.....\$28,718,950 \$29,707,529 \$33,640,164

The receipts of the Michigan Central Railroad Company for May

were.....\$185,727

May 1857.....235,803

Decrease.....\$ 50,706

The earnings of the Chicago and Fond du Lac Railroad in May

were.....\$40,893.99

May, 1857.....29,593.74

Increase.....\$11,299.55

The road is of the same length as last year. For the year ending 1st October, 1857, this road earned net \$220,000. From present indications, the net earnings of the current year will be about \$300,000, which will pay the interest on the first mortgage, and leave a surplus of \$90,000. It is not, however, expected that the Company will commence the payment of interest until February next.

ILLINOIS CENTRAL R. R.—The land sales and earnings of the Illinois Central Railroad for May, 1858, are:

	LAND DEPARTMENT:	Acres.	Price.
Construction lands sold.....	4,249.63	\$58,594.13	
Interest fund lands sold.....	80.00	1,395.20	
Free fund lands sold.....	800.64	13,001.32	
Total sales during the month..	5,129.67	\$72,980.50	
To which add town lot sales..		2,261.40	

Total of all.....\$75,232.05

Sold since January 1, 1858.....377,352.05

Sold previously.....1,200,933.78 15,311,440.40

1,229,583.16 \$15,683,892.45

Construction bonds cancelled

in May, 1858.....\$27,000

Construction bonds cancelled

previously.....632,000 \$359,000

Free land bonds cancelled in

May, 1858.....10,000

Free land bonds cancelled pre-

viously.....73,000 83,000

\$742,000

THE LATE ACCIDENT ON THE MICHIGAN SOUTHERN.—A committee of investigation, appointed by the passengers on the Michigan Southern Railroad, at the time of the recent accident near Adrian, have reported that the cars run off the track on an embankment about five feet high, while crossing a culvert of about ten feet span, which the track crosses upon two heavy pieces of timber, on which the ties or cross pieces of the road are laid loose and without any fastenings. The rails were fastened to these ties with spikes, but inasmuch as the ties themselves were not fastened to the stick of timber on which they rested, they could be slid out of place without much force.

On examining the cross-ties, many of them were found to be so rotten that they would not hold the spikes, and in some instances could be picked to pieces with the fingers. The agents and workmen on the road state that all their culverts are built in the same manner.

Comments are unnecessary. In the absence of Legislative penal enactments, the only recourse of the public is to withdraw patronage. Culverts, bridges, etc., will then soon be put in good order.

The earnings of the Illinois Central Railroad for May were:

Passengers.....	\$65,440 29
Freight.....	77,552 77
Extra baggage.....	469 00
Mails.....	4,666 90
Express.....	1,507 30
Rents.....	500 00
Rent of road.....	4,564 03
Storage, &c.....	300 00

Total.....\$155,101 29
Increase in May, 1857.....202,008 00

Decrease in 1858.....\$46,997 71

1,200 Kegs No. 1 Railroad Spikes, $\frac{5}{8}$ by 9-16th, Corby, Gossin & Co's make, for sale very low by
TRABER & AUERB.
7 Public Landing.

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEVENS & JENKINS, Covington, Ky. These rails have decided advantages over ANY rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEVENS,
June 17.—Jyr. Cincinnati Ohio.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND NEW YORK CENTRAL RAILROADS.

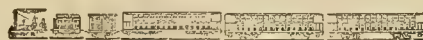
The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

Also, No. 2 Burnet House. R. E. LEE, Ticket Agent.

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Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.
W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
no13 10 Wal ar Broadway, New York.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

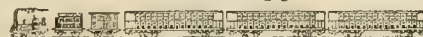
Are prepared to execute all orders for

Railroad Cars of Every Description.
WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in a cases. ap16

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Jaunesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even ing.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Supt.
Racine, May 15, 1857. m121

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas filters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
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AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

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And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5 tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.
July 14, 1857. jy23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

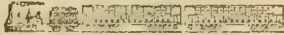
D. M. CARHART,
Box 1831, Cleveland, Ohio.

T. F. RANDOLPH & BRO.
Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

OR SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

IRON BOILER FLUES
PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

6 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From 1/4 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 209 South Third St.,

PHILADELPHIA.

[ap8]

STEPHEN MORRIS,
THOS. T. TASKER, JR.,CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard, 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.] J. H. GOODMAN & CO.,
no. 7 Wall st., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,

ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND.

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, aside from our regular business, respectfully solicited.

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

JOEL C. LANE

feb4th

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also include—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,600,000 feet Trestling R. M.; 2,500 yards Plain Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,000 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging—44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.

W. M. B. MURFORD, President.

Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Marketst.,

1 n24 NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

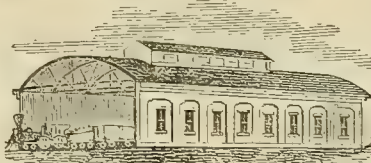
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs., \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third Street, Cincinnati, O.

MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C.

april2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite

the attention of RAILROAD

Companies, Manufacturer

Distillers, Miners, and the pub

lic generally to these Pumps

as the best Pump now in use

and acknowledged by all who

have used them to be perfect—

are simple in their construc-

tion, compact, durable and not

likely to get out of order; well

adapted for Steamboats, Rail

road Water Stations, Distille

ries, Breweries, Furnaces,

Mines, Rolling Mills, Paper

Mills, Factories, Wells, Cla

terns, Stationary Fire Engines, Garden Engines and for

all purposes where a Pump can be used. Also, for

forcing a large body of water to a great height or distance

rapidly.

Also, McGowan's Patent Ball Valve Pump, designed

for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings

Lead, Copper and Gas Pipe furnished at the lowest mar-

ket prices.

Full and perfect satisfaction guaranteed in all cases,

when properly put up according to directions.

Orders thankfully received and promptly filled at the

shortest notice.

SILVER MEDAL. (The highest prize) awarded

these pumps and Steam Pumping Engine at the late Fair

of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, 18.

JOSE. LIVINGSTON & CO.,

9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 6:45 A. M., 3 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

ap10 Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

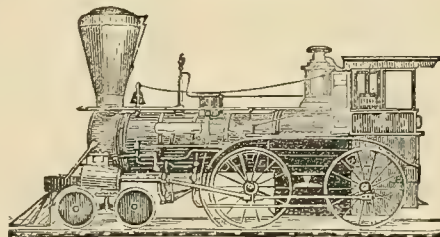
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap20

MOORE & RICHARDSON.

TO LOUISVILLE IN SIX HOURS.

Change of time for Indianapolis, Chicago, and all the Northern and Western Cities.

OHIO AND MISSISSIPPI RAILROAD.

ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

FOR LOUISVILLE—At 9 A. M., and 3:30 P. M.
FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,
Acting Superintendent.

Omni-buses run from the principal hotels, and call on orders left at the Ticket Offices.

Omni-buses for 5:45 P. M. train will leave Gibson House and No. 2 Burnet House, only.

W. S. BABCOCK,
Ag't Cin. and St. Louis Omni-bus L
Office No. 2 Burnet House.

'an2

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburg and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:50 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

OFFICE OF PITTSBURG AND CONNELLSVILLE R. R. Co.
Pittsburg, May 18, 1858.

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connelville Railroad Company, in the city of Pittsburg, until the 15th of June next, inclusive, for the GRADUATION, MASONRY, BRIDGING, TREESTLING, STATION-BUILDINGS AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles, along the Monongahela River, between Pittsburg and Port Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the First Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all the coming autumn.

By order of the Board of Directors.

may7:3w

BENJ. H. LATROBE, Pres

WAREHOUSE

No. 5 FRONT STREET

Opposite Public Landing,
Cincinnati, O.**PORTER, ROFFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."**

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.**Union Works, Baltimore.****POOLE & HUNT,**

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS and AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,**STATIONERS, BOOKSELLERS,**

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets,

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati**J. T. CRAPSEY,****ATTORNEY AT LAW,**

OFFICE:

N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI**SCHENECTADY****Locomotive Works,**

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

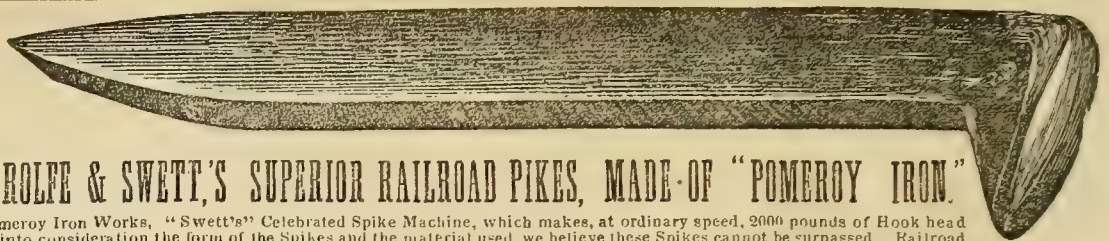
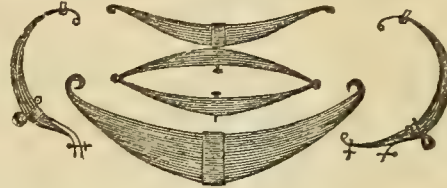
LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.**WALTER McQUEEN Supt.,** Aug 16 y**MCDANIEL & HORNER,****LOCOMOTIVE****AND CAR SPRING****MANUFACTURERS, WILMINGTON, DEL.**

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

Harlan & Hollingsworth,

WILMINGTON, DELAWARE,

Manufacturers of all kinds of Railroad
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable rights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

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RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents, with Time-tables only.

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Railroad Record.

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W. WRIGHTSON, - - - }

CINCINNATI:
THURSDAY MORNING, JUNE 24, 1858.

Railroad Record

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CHICAGO AND ROCK ISLAND RAILWAY DIRECTORS.—The following gentlemen were elected to serve as directors for the ensuing year:—Messrs. Henry Farnam, Chicago; F. H. Tows, New York; Thomas C. Durant, New York; C. W. Durant, Albany; William Walcott, Utica; F. W. Dunham, New York; David Dows, New York; William H. Macy, New York; I. N. Cobb, New York; I. B. Jervis, New York; E. Cook, Davenport; N. B. Judd, Chicago; J. F. Tracy, Chicago.

VOL. 6.—No. 18

CINCINNATI AND ITS WEALTH.

It is a curious fact that our city corporations have maintained their credit and financial stability, better than any other public bodies. Many of the States have not hesitated to let their bonds lie over unpaid, and their credit be prostrated; but, this has not been the case with municipalities. We do not recollect an instance in which a city has failed to pay its liabilities promptly. Perhaps one reason of this is, that city authorities are all under the immediate eye of their constituents, and especially of commercial men, who know the great value of credit. A city council can be called together at any moment, and have at all times access to the sources of money supplies, so that they can make preparations, and maintain their credit in times of the most severe pressure.

We have before us the Fifth Annual Report of the City Auditor, (S. S. McGibbons,) a very correct public officer, whose report is carefully made up. An examination of this document may prove interesting, as exhibiting the operations of City Government and City finance.

1. Let us look, a moment, at the growth of Cincinnati. The City Auditor makes the present population of the City 225,000. This is considerably above what we should place it. If within the city limits there are 200,000, we shall be glad to know it.

The census populations of Cincinnati have been as follows, viz.:

In 1830	24,831
“ 1840	46,382
“ 1850	115,438

It appears that from 1830 to 1840, the increase was 90 per cent., making 9 per cent. annually. From 1840 to 1850, it was 145 per cent., or at the rate of 14 per cent. annually. If this latter rate were taken as the ratio, the city would contain more than the Auditor has estimated it at. But, it is certain, that there has been no such rapid growth in the last five years, and, it is probable, not so much as between 1830 and 1840. On the whole, we think 8 per cent. annually quite high enough, which would place the population of 1855 at 161,000, and that of 1858 at 190,000. This, however, is very rapid progress, and in 1870 would place Cincinnati above every city in the United States, except New York and Philadelphia. Such will probably be the result, if manufactures be as much encouraged as they ought to be. The opening up of iron and coal mines in the mineral districts, will greatly enlarge the wealth and population of Cincinnati.

2. **WEALTH.**—The wealth of Cincinnati has increased quite as fast as its population. This may be known best by the successive valuations of the county. Four-fifths of the wealth of the County is in the city, and they may be taken, for this purpose, as nearly

identical. The valuations of Hamilton County have been as follows, for many years:

In 1841	\$ 10,764,494
“ 1845	12,442,091
“ 1847	51,756,740
“ 1850	55,670,631
“ 1852	84,314,491
“ 1855	112,945,419
“ 1857	120,890,791

From 1840 to 1857, the increase of population was 300 per cent.; but, the increase of wealth was 1,100 per cent! From 1850 to 1857, inclusive, the increase of population was 56 per cent.; but the increase of wealth was 120 per cent!

This fact shows the *concentration* of capital and industry in a very high degree, without which no such result could occur. In 1840, the property of Cincinnati amounted to \$230 for each living soul. In 1850, it was \$400 to each person. In 1857, it was \$660 00. *Absolutely*, then, the people of Cincinnati have added 50 per cent. to their wealth in the last seven years!

Looking at this fact in another point of view, we can readily see the relation of production to consumption, or, in other words, the *accumulation* in Cincinnati. This accumulation is precisely equal to the increased value of its property—which is seven per cent. annually. This accumulative value is a gain on capital. It is just so much as the products of the earth, industry and skill exceed the consumption of the people. In 1855, '56 and '57, this was \$5,000,000 per annum. If, as we suppose, the exports amount to about \$60,000,000, it was nearly seven per cent. on the exported values.

This, however, is not the true test of the value of *interest*; for it is the accumulation, or the use of capital, not regarding either the labor, or raw material. It may be they would be idle, without borrowing money. In that case, a loan of half the amount of capital employed would afford a profit of 14 per cent., and thus justify the manufacturer or tradesman in borrowing at 10 per cent.

3. **CITY PROPERTY.**—The Auditor estimates the property of the City thus:

Market Houses, Public Landings, etc.	\$2,000,000
School Houses and Property	571,366
Fire Department	355,151
City property	903,858
City Water Works	1,000,000
White Water Canal	400,000
Debts due the City	1,495,763

Aggregate.....\$6,726,039

With the exception of the White Water Canal Stocks, this property is not over-estimated.

Much of the property held by the City must, in time, greatly increase in value.

4. **DEBTS DUE.**—The City owes the following amounts:

Loans to Railroads	\$1,200,000
For Wharf Property	474,010
“ Water Works	975,000
“ Schools	70,000
“ City property	60,000
“ City Debt	510,000
“ White Water Canal	450,000

Aggregate.....\$3,719,000

It is seen, therefore, that if the debts of the City had to be paid out of its property, it could easily be done; but, in fact, the Railroad and Water Works debt would be paid out of these concerns. There would then remain about \$1,500,000 to be paid out of three times the amount of property.

The perfect security of the Bondholders of the City of Cincinnati is quite obvious. For this reason it is, that the City finds it easy to make loans, at any moment, for low rates of interest.

7. TAXATION.—The taxes of Cincinnati, at different periods, have been as follows, viz.:

In 1830.....	\$ 23,336
" 1840.....	46,445
" 1850.....	222,464
" 1853.....	464,322
" 1855.....	716,946
" 1857.....	671,911

It is thus seen, that the taxes increase quite as fast as the population. Much of this, however, arises from the benevolent institutions of the City, and is borne with cheerfulness. Among these items may be enumerated the following:

House of Refuge.....	\$ 28,000
Infirmary.....	72,000
Schools.....	266,000

These include about half the whole expenditures of the city, and are those which are necessary, for either the sustenance or the education of the people.

A review of the above facts leads us to the conclusion, that the confidence placed in the Bonds of cities is just. They have large amounts of property, the population is compact, and readily taxed, and their wealth is growing, and tangible. The security, therefore, is more perfect, and the capitalist can afford to take a less interest.

THE SOUTHERN PACIFIC R. R.

Our readers have seen that the sale of the Southern Road was made at Marshall for a nominal sum. It seems to be believed, if not conceded, that that sale is void, as being a manifest fraud. To us it looks like a contrivance of the Directory itself to cut off on one side the creditors, and on the other the stockholders! The badges of fraud, as the lawyers say, are so very obvious, that we think no court can mistake them.

According to the terms of the Texas Act, as soon as the sale was made, a new Company was formed, and who were they? At the head of these officers are Messrs. Wigfall, Lawrason, Blanche, etc., officers of the old pany!

It is plain a game has been played at the expense of the *bona fide* stockholders, and which, we believe, no court even of Texas will sustain.

Below we give an extract from a card issued in the *Delta*, of Mr. Archer, one of the Directors elected by the new Company, wherein he says:

"It has been my earnest wish to protect

the interests of the many who have invested money in this great and patriotic enterprise. There have been two antagonistic parties heretofore; and the Texas party being extinct by their own suicidal frauds, the other party seem to think that their power is unchecked. Although the settled belief is almost universal that much of the stock issued in New York is fraudulent, and the contrary has not yet been shown; although but little more than one year ago, people of the South paid three hundred and fifty thousand dollars for stock on express contract that the domicile of the Company should be permanently in New Orleans until the railroad should be completed through Texas, and that a majority of the Directors should be given to the South; both of which conditions have been violated; although the Company is struggling for a doubtful existence, and the just indignation of a wronged people is deep and damning, a resolution was offered to reopen a transfer office in New York. I objected that a transfer office was now unnecessary, and if necessary, New Orleans is the proper place. Two Directors made plausible arguments to show the necessity of a transfer office in New York, to transfer that which has no value. They were strong and convincing arguments to show that stock jobbing is more important than the existence of the Company. I immediately tendered my resignation, and left a body into which I had reluctantly entered, almost at a sacrifice of self-respect.

"But I wish them to preserve the existence of the company. Texas can rightfully purge the company of all the fraudulent stocks or claims. It was my purpose to write to the Governor of Texas to solicit that he would recommend to the Legislature to reserve to this company lands on each side of the road sufficient to satisfy the munificent grant already made, but on express condition, that there shall be only twelve Directors of this company, four of whom shall be appointed by the Governor on the part of the State, and eight on the part of stockholders; that a vote of two-thirds shall be necessary to pass any by-law or other measure; thus giving to the State a veto. And that it shall be the duty of the Directors on the part of the State to cite any stockholder whose stock is suspected to have been fraudulently issued, to make proof to the contrary, in default of which proof they shall declare it void; but that said stockholder shall be allowed an appeal to the proper court of the State.

"I appeal to you, stockholders, to join in this application."

We think Mr. Archer is very nearly right, if, as we believe, an appeal to Texas, for right and justice will be available.

The simple facts are these: There is a large amount of *bona fide* stock issued either for money and services rendered the Company, or held by innocent purchasers. Now, if, as we believe, and have endeavored to prove, the property of the Pacific Company and the Franchises are worth many millions of dollars, will Texas, as a State, or Texas Courts, allow contending parties for power in the road, to sacrifice the interests of these innocent holders? We can not believe it. A great swindle has been brought about by *somebody*. Will the courts and the Legislature make themselves party to that fraud?

It is palpable, for example, that if \$350,000 had been actually paid and expended at New Orleans, the road could not have been sold for debt? Was it paid? Was it expended? The Stockholders should, at least, have a thorough investigation, and expose the real swindlers.

IOWA CENTRAL AIR LINE R. R.

At the annual meeting of the above Company, held at Maquoketa, June 2d, the following gentlemen were elected directors for the ensuing year: H. S. Durand, C. J. Bridges, T. P. Handy, Joseph Medill, S. S. Jones, Samuel Rand, A. B. Cotton, C. Hall, Jonas Clark, J. E. Goodenow, A. Daniels, N. M. Hubbard, N. Sayles. At a meeting of the directors S. S. Jones, Esq., was re-elected President. J. Edgar Thompson and G. A. Smith were appointed as trustees and financial agents.

At a meeting of the stockholders of the Terre Haute, Alton and St. Louis Railroad Company, held at Shelbyville on Monday, the following gentlemen were elected Directors:

Edward C. Litchfield, James A. Rayner, John Stryker, James Barnes, E. B. Litchfield, Robert Christie, Jr., C. Murdock, P. C. Huggins, S. W. Moulton, W. E. Bacon, Samuel Wade, Edward Freeman, and Charles Summers.

At a subsequent meeting of the Board, Edwin C. Litchfield, was elected President, and James A. Rayner, Vice President.

ENGLISH RAILWAYS.

The railways completed in the British Islands are about 9,000 miles in length, and cost not far from £313,000,000 sterling. The tunnels on these lines are nearly seventy miles long, with upward of 25,000 miles of bridges and viaducts. Of the latter there are nearly eleven miles passing over and through the streets of London alone.

The excavations for building these roads are estimated at 550,000,000 cubic yards, equal to a mountain half a mile in diameter at base, and one and a half miles in height.

It is estimated that trains upon these roads traverse not less than eighty millions of miles per annum—equal to the distance from the earth to the sun every fourteen months. To accomplish this 5,000 locomotives are required, which, if placed end to end, would extend thirty miles. But of other cars there are not less than 150,000, which, at an average of twenty feet each, would reach in solid line 500 miles.

To work all this machinery, not less than 110,000 persons are directly required, while, probably, 50,000 more are collaterally employed in furnishing supplies and materials; these, with their families, form one in fifty of the entire population of the United Kingdom.

The number of passengers carried on the

English railways in 1856, was 129,315,196 who were transported 1,822,049 miles, at an aggregate fare of £11,000,000. The same year 10,450,625 cattle, sheep, and pigs, and 23,823,930 tons of mdse., and 40,938,675 tons of minerals were transported at a cost of £11,739,156 sterling.

The total receipts of the English railways for 1856 was £23,165,493, which was pretty evenly divided between the passenger and freight traffic as above shown.

The working expenses for the same year were £10,887,000, and the interest on funded debts £3,607,000, leaving £8,671,493 for profits, equal to 3.72 per cent. on the capital invested, which is but a poor return to the shareholders, considering the uncertainty and liabilities of the business.

LA CROSSE AND MILLWAUKEE RAILWAY.

This unfortunate railroad having attracted much attention of late, we extract the following from the Editorial correspondence of the *Milwaukee Sentinel* relative to its condition and prospects. The road is now running to Tomah, 156 miles from Milwaukee, and the rails are laid two miles further West. In a week or two more the track will be finished to the tunnel, 161 miles from Milwaukee, and a temporary track is already in progress over the ridge, by means of which iron, &c., can be taken to the other side, and the rails laid down the valley of the La Crosse, in advance of the completion of the tunnel. The grading all down the valley is in such a forward state that the contractors assured us that it would all, with the exception of one heavy cut, be completed and ready for the superstructure by the 1st of July, and the tunnel itself will be finished by the 1st of September. Unless, therefore, some unforeseen contingency arises, the La Crosse and Milwaukee Railroad will be finished and in running order through to the Mississippi by the 15th of October, or 1st of November next.

The road itself, as far as completed, is in admirable order; the rolling stock ample and of the best description; indeed all the appointments of the road are perfect.

The opening, now so close at hand, of this grand thoroughfare, will be an event of the most signal importance to the citizens, not of Milwaukee only, but of the principal portion of our State. More than two-thirds of Wisconsin lies to the north of its line, and will be tributary to its business. Its local traffic, therefore, must always be large and remunerative; while its through business will speedily outstrip even that of the Chicago and Galena Railroad; since, from the nature of things, it must command the bulk of the trade and travel between Minnesota and the fertile and fast-settling plains beyond, and the Atlantic seaboard.

Nor is this all; for simultaneously almost

with the opening of the La Crosse Road to the Mississippi will come the completion of the Detroit and Grand Haven Road to Lake Michigan and the permanent establishment of the steam ferry between. This will connect our Milwaukee roads—spreading like a fan from south round west to north, traversing every part of our own State, and penetrating Illinois on the south, Iowa on the west, Minnesota on the north-west, and the regions of Lake Superior on the north—with the system of roads which traverse Michigan, Canada, New York and New England, and will give us the benefit of their influence and co-operation. And while this is already true of our Eastern border, the nascent railroads of Minnesota, Docotah, Nebraska—germs of the great Pacific Railway—loom up grandly on the west.

THE SMOKE NUISANCE.

A Mr. Spence, of Manchester, suggests in the *London Builder* a method of ridding large cities of the "smoke nuisance," which has novelty for a merit, even if it be not very practicable in its application. His plan is to have smoke drains under the streets, just as we have gas and water drains, into which all flues shall be carried—the whole terminating in one grand stack or chimney on the summit of some neighboring hill. This is a grand idea, and would suit us exactly, as we might not only rid the city of the great annoyance of smoke—now almost intolerable—unsightly chimneys which disfigure princely dwellings and warehouses; but add another attraction to the Queen City in the form of an "Infant Vesuvius," on say Mt. Adams or "Pyro Garden," which would furnish "a pillar of cloud by day and a column of fire by night," to point out to weary pilgrims the "promised land."

COST OF RUNNING ENGINES.

From some statistics furnished the *Railway Times*, by Mr. Williams of the Central Division of the New York Central for April, 1858, we gather the following facts:

Total miles run.....	33,451
Cords of wood used.....	2,241
Average No. of miles run to one cord of wood...	37.25
Average cost per mile for wood.....	9.4 cents.
Do. do. repairs.....	6.37 "
Do. do. engines.....	50.99 "
Pints of oil used.....	4,023
Average No. of miles to one pint of oil.....	20.74
Average cost per mile of oil, pack, and waste.....	84 cents.
Average cost per mile of engineers, firemen, and cleaners, etc.....	4.37 "
Total cost of running 32 engines.....	\$17,512 32

This compares favorably with the cost of fuel on some new England roads, which, according to the *Times*, 1857, was 17.8 cents on the Massachusetts, 11.1 cents on the Connecticut River, and 31.4 cents on the New Bedford. The cost of fuel, however, is not a very good test, prices varying greatly in different places. Quantity and quality would be a better test.

Railways will find it to their interest to look well after the running expenses of their

road, and to aid them in their work we shall always gladly publish any facts bearing upon the subject. We will, therefore, feel greatly obliged to Master Machinists and Superintendents for the performances of their engines for any stated period their convenience may suggest.

☞ The increase of travel on the English railways is very wonderful. In 1851 the number of passengers carried was only 81 millions, which in 1857 has swelled to the enormous number of 134,000,000! all transferred, too, at a loss of life and limb one hundred to one less than by the old stage-coach, for in 1856, out of 71 casualties, but three pure accidents could be selected, and in 1857 only 16 out of 81. This speaks well for the management of English railways.

INCRUSTATION OF BOILERS.

The *London Engineer* has an excellent suggestion for the prevention of incrustation of boilers, by filtering the water of its impurities before putting it in the boilers. At railway stations this could be readily done, and at small expense, so also where stationary engines are used. On steamboats it would not be so easy, yet it can be done, and should demand at once the attention of steamboat Engineers and owners, especially in our western and southern waters, where the impurities are of a mechanical nature and readily separated.

MEMPHIS AND OHIO R. R.

We learn from the *Memphis Bulletin*, that the work on the Memphis and Ohio R. R. is progressing rapidly, there being seven hundred hands now engaged, and which force is soon to be largely increased.

By the 1st of July, the *Bulletin* says, there will be graded, bridged and cross-tied, twenty miles of road beyond Brownsville. This will increase the means of the Company \$200,000 from the State's Loan, and enable them to push the remainder with additional vigor. All the iron for the twenty-five miles between Brownsville and the Junction with the Mobile and Ohio Road, is already secured, and there is no reason to doubt that the whole track will be laid to that point by the 1st of November. By that period, the Mobile and Ohio Road will be completed out from Columbus to the same point, thus giving an uninterrupted outlet by Railroad north as well as east.

The same paper further states that the grading on the road, north of the Mobile road, is going on finely and prosperously, and will be finished to Paris by 1st of May, 1859. It is anticipated that the whole road to Paris will be finished and in running order within the next year. The President of the Road, Col. Robertson Topp, goes north in a few days to purchase the iron for this portion of the road—fifty miles in length.

Railroads.

IOWA CENTRAL RAILROAD.

We have received through the Maquoketa *Sentinel* the First Report of this Company, which gives a pretty full account of its organization and prospect.

This Company was organized under the general laws of Iowa, on the second day of May, A. D., 1858.

The road commences at two points on the Mississippi river, fifteen miles apart, viz.: at Lyons city, opposite Fulton, the western terminus of the Dixon Air Line of the Galena and Chicago Union Railroad, (136 miles west of Chicago), and at Sabula, opposite Savanna, the western terminus of the Racine and Mississippi Railroad, about the same distance from Milwaukee and Racine on Lake Michigan. The line of the road runs from Lyons city up on the bank of the Mississippi river, and down from Sabula to a point of junction about seven and a half miles from each of those towns, and from same junction west across the State of Iowa, following as near as practicable the forty-second parallel, that being the center or middle line, which divides the State, and striking the Missouri at a point midway between the north and south bounds of the State, and 335 miles from the Mississippi.

The lands through which this road is to pass are rich, and said to abound in coal and timber, besides being well watered. The eastern parts are pretty generally settled, and under a fair state of cultivation.

By acts of Congress and the General Assembly of the State of Iowa, this Company is vested with a munificent grant of lands.

This grant authorizes the company to go a distance of fifteen miles on each side of the track, to make up what would be equivalent to six miles on each side, where the lands have already been entered, or otherwise previously disposed of by Government, thus giving the company a strip of land 30 miles wide clear across the State, to make their selections from.

This grant is equal to 3,840 acres for each mile of road constructed. The company is entitled to 76,800 acres at once, and 79,800 acres additional for each 20 miles of railroad constructed, or, in other words, the act of Congress provides for the title being perfected to 76,800 in advance—and as much more when the Governor of the State shall certify that any continuous twenty miles is completed, and so on in like quantities for each twenty miles, till the whole quantity is vested in the company, which is a like quantity of land per mile with that which the Illinois Central R. R. Co. received, and on much better terms.

The report states that the company is now selecting its lands under the Land Grant. It

is already certain that it will get 906,480 acres of land, and it is confidently expected the amount will be increased by lands where there is a conflict of title with Des Moines Navigation Company, to over one million of acres. The selections will soon be completed, and duly certified by Government. These lands being generally of superior quality, will when the railroad is completed to the Missouri River, it is confidently believed, sell at an average sum of at least ten dollars per acre, exclusive of town sites, which the company will lay out on the line of the road, where stations are required. This grant certainly will be amply sufficient to build and equip the road, provided it is not all squandered away, by bribing Legislatures, Governors, &c. as in Wisconsin.

Soon after crossing Cedar river, 86 miles from the Mississippi, the line of road enters the great coal basin of Iowa, and traverses it for a distance of over one hundred miles. The amount of business that the coal trade will furnish this road must be very large. The coal is of easy access, and said to be of an excellent quality.

The estimated cost of the road is as follows:

Whole length of line.....	335 miles.
Its estimated cost, including cost of lands and town lots, contingencies, and expenses of every description, and equipment complete, \$22,089, per mile.....	\$7,400,000
Toward which there has been expended as follows, to wit:	
For work done.....	\$30,211 41
For obtaining lands.....	700,000 00
For right of way, salaries, discount, interest, office expenses and incidentals.....	95,265 25
For engineering.....	62,176 63
Other expenditures, estimated,.....	2,316 71

Making expended in all, \$1,210,000

Leaving a further expenditure required to complete of..... \$6,190,000

As follows:

From the Mississippi to the Iowa River, 162½ miles, including branch at 16½-53½ 32 per mile.....	\$2,687,000
From the Iowa river to the Missouri river, 180 miles, at 19,461 11 per mile.....	3,503,000

Making required to complete, as stated, \$6,190,000

From Lyons to Maquoketa, 34 miles, the grading is nearly completed, and a large amount of work done between there and Anamosa, as well as between Sabula and junction. The ties are also furnished for about twenty miles of road from the river, west, and the right of way mostly obtained and paid for.

The resources of the Company are thus set forth in the report:

1st. Stock, with farming lands accompanying the same, as per "Financial Plan," \$3,300,000, with 412,500 acres farming lands of which there has been expended, as above stated, \$1,210,000, with 151,250 acres farming lands, leaving stock on hand \$2,090,000, 261,000 acres farming lands.

2d. Stock, with town lots accompanying the same, \$1,700,000 with say 17,000 town lots.

3d. First mortgage bonds, \$4,000,000 with 412,500 acres farming lands, making

stock and bonds still on hand \$7,790,000 with 673,750 acres farming lands, and 17,000 town lots.

Estimated cost to complete, \$6,190,000, leaving \$1,600,000, or a surplus of over 25 per cent. for contingencies and interest, beyond the amount required to complete, with 58,000 acres of farming lands still unappropriated, together with the large prospective value in town property—seventy-five thousand, four hundred and seventy town lots. This is exclusive of the lands claimed by the Des Moines River Navigation and Railroad Company, which, if held by this Company, will increase the above amount over 90,000 acres.

Toward the amount yet required to complete, of \$6,190,000, there is subscribed by the County of Lynn, for which the company hold the bonds of the County.....	\$200,000
By Jones county, for which the company hold the bonds of the County.....	35,000
Individual subscriptions.....	465,000

Making total unexpended subscription, \$700,000

Leaving.....\$5,490,000

To provide out of \$4,000,000 first mortgage bonds, with 412,500 acres of farming lands, \$1,390,000 of stock, with 173,750 acres of farming lands and \$1,700,000 of stock, with 17,000 town lots, together with the unappropriated 58,000 acres of farming and 75,470 town lots. Having as a basis of security to the bonds, \$1,910,000 of stock already secured, of which \$1,210,000 has been actually expended, and the balance, \$700,000, subscribed.

It will be seen that the plan of this company is to complete the road with an indebtedness of \$4,000,000; and although this debt is a lien upon the whole work, the land pledged as a further security for this debt, it is confidently believed, will ultimately pay it off.

The company propose to give stockholders a certificate of one hundred dollars for every hundred dollars they pay the company, and a land scrip of one hundred dollars, which they can enter on farming lands at an average value of eight dollars an acre, or on town lots at their appraised value; and it will be the policy of the company to see that such appraised value is *low enough* to encourage immigration and settlement on these lands and town lots.

We think this road offers some inducements to capitalists that is worth their consideration.

HOUSTON TAP & BRAZORIA RAILWAY.

The First Annual Report of this Company is lying before us, says the *Houston Telegraph*, and it represents the enterprise in a most gratifying position. This railroad was chartered in August, 1856, and as appears by this report, the company was organized in June 1857. In September, contracts for the whole distance from the terminus of the Tap road to Columbia, (43 miles) were let. This whole distance is now ready for the iron, and that will be purchased within thirty days from the present time. In addition to this, the portion of the road from Columbia to Wharton, is to be thoroughly surveyed and located in a very few days. There is already about \$100,000

subscribed for that end of the line, as follows:

Brazoria County Bonds.....	\$40,000
Wharton " ".....	40,000
Subscriptions.....	20,000

and this last item will in a month more be made up to \$50,000. This will be enough to grade and tie the road there, and perhaps more.

The estimate of traffic on the road as are all the estimates yet made in connection with the enterprise, is an exceedingly safe one. We copy it:—

7,000 hhds. of sugar at \$3 per bhd.....	\$21,000
10,000 bbls of molasses at 1.25 per bbl.....	12,500
4,500 bales of cotton at \$1 per bale.....	4,500
Corn, hides and other country produce.....	5,000
Passengers both ways.....	18,000
Down freights, including light and heavy merchandise, lumber, staves, machinery, &c.....	35,000
Mail service.....	4,000
Total.....	\$100,000

This will considerably more than pay the running expenses and interest on the cost of the road, and with the natural increase which the road is sure to create in the traffic, will enable it in a few years to repay every dollar of the State Loan from the earnings of the road.

The Engineer's report is a most interesting document, and proves most incontrovertibly that this enterprise has been managed economically. The whole length of the road from Houston to Columbia, including the Tap is 50 miles 581 feet, of which, 7 miles (the Tap) are now in operation. The maximum grade is 7 feet per mile, so small as to be inappreciable. The shortest curve has over a mile radius, and most of the curves are very slight. The grading was begun in October, and has been finished since this report was written.

The experimental line run from Columbia to Wharton, was 34½ miles in length, along a country well adapted for railroad purposes.

The estimate of the cost of the 43½ miles from the end of the Tap to Columbia is as follows. The report gives the items, we deem it necessary to give only the aggregates.

Grading, bridging, grubbing and clearing....	\$67,994 35
Superstructure including cross-ties, iron, laying tracks, &c.....	288,759 86
Station buildings, &c.....	6,550 00
Equipment, embracing 1 locomotive, 1 passenger, 1 baggage, 15 platform, 15 box and 2 hand cars, all placed in running order on the road.....	22,550 00
Engineering.....	8,000 00
Total.....	\$393,854 21

Making the cost per mile \$9,054. This is on a basis of the cost of the iron being \$55 delivered, and it may perhaps be bought for this. If however, it should cost \$60 per ton, an outside price, the whole cost of the road will be less than \$9,500 per mile.

The appendix to this report contains all the general railroad laws of Texas, and is a very useful feature. On the whole the report is the most satisfactory one in every respect we have ever seen.

We can not forbear a word or two concerning this enterprise. Our long advocacy of it has thoroughly identified us with the work, and we know what we are saying when we speak either of it or the country through which it runs. There is not, to our knowledge a road in the United States of this length, that has been so rapidly built. We do not believe there has been one built with so much harmony of feeling. There is not another that has been better built, or when

this is finished, the ties and bridges being mostly of *live oak*, better calculated to last. There is not another that has ever been built at so low a cost. There is not another in the world that runs through so rich a country, and that will so powerfully develop such resources as nature has so lavishly bestowed upon this region.

From Houston to Oyster Creek is twenty miles of prairie. Thence for thirty miles to Columbia, and from that point thirty-five miles to Wharton, this road winds through a rich sugar region. In addition to this, the planters of Matagorda, are already speaking of tapping the road as it bends toward them on its way to Wharton, and running a branch fifteen or twenty miles down into lower Caney. When this is done there will be no less than 250,000 acres of the richest land the sun ever shone upon, within three miles of the track of the road. It also crosses two navigable rivers and touches upon another, and by them fully 150,000 acres more are brought within easy access to it. This land is capable by a low estimate, leaving out necessary timber, pastureage and corn lands, &c., of producing 200,000 hhds. of sugar annually. All that is wanted is to get the resources of the country developed. Can any body doubt these things?

Five years ago we started the ball in motion of having a railroad from Columbia to the Colorado. Two-thirds of the people of Brazoria county ridiculed the idea, and outside of the county hardly any person regarded the project as feasible. Two years ago we helped to get the idea of a connection by rail with Houston before the people there. Here again we were met with the cold shoulder even by men who are about to realize fortunes from this enterprise. From our deep concern in both these works, we were even pronounced a visionary, by men too, who would dislike to have old fogysim imputed to them. Gentlemen who had large landed estates then refused to identify themselves with the work, and continued to refuse to do so till it became almost a fixed fact. But we have lived to see both our roads now so far along as to place their completion beyond a peradventure. We yet hope to see all our predictions about this country fulfilled. Another ten years will bring it out, and those who knew Brazoria county in 1850, will find none of their land marks in 1870. The dreams of the visionary will be made real, and those who ridiculed him in 1853 will in 1863, aye, even now, are they beginning to pronounce him a prophet. This verdict likewise will be his whole reward.

CHICAGO, SAINT PAUL AND FOND DU LAC RAILROAD—BONDHOLDERS' MEETING.

Pursuant to a previous call a meeting was held the 10th inst. at No. 12 Wall street, N. Y., of the Bondholders of the above Road, to consider and devise measures for the completion of the road, especially that portion of it between Fond du Lac and Oshkosh, by the 1st of August next, with a view of securing a grant of 154,000 acres of land. Thomas Barron, Esq., having been called to the chair, the President of the road rose and offered a few remarks relative to the condition of the road, amount of its earnings, expenses, etc., up to the 1st of June last.

The earnings of the road during the first three and five months of 1857 and 1858, he said, were as follows:

EARNINGS.

	1857.	1858.
January.....	\$15,790 35	\$20,446 82
February.....	15,925 83	18,271 70
March.....	26,488 13	25,392 88
Total.....	\$58,204 31	\$64,111 40
April.....	30,221 55	38,534 61
May.....	29,993 74	49,493 29
Total.....	\$118,419 60	\$143,536 30

Being an increase in the earnings of the road during the first three months of 1858 over the corresponding months of 1857, of \$5,907, and a difference in favor of the first five months of 1858 over the corresponding months of 1857 of \$18,214, while the expenditures during the months of January, February and March of the present year were \$16,763 30 less than during the corresponding months of 1857, as follows:

EXPENSES.

	1857.	1858.
January.....	\$20,277 50	\$13,076 13
February.....	16,905 82	12,100 34
March.....	17,734 38	12,977 12
Total.....	\$54,917 39	\$38,154 09

During the financial crisis last Fall and Winter, the road became indebted to employees and others, and the earnings of the road had since been applied to the liquidation of their claims only, no part of the receipts having been appropriated to the payment of office expenses in New York. The conditions on which the grant of 154,000 acres of land was made to the road require its completion to Oshkosh by the 1st day of August next. To secure the performance of the work, \$50,000 only would be necessary, inasmuch as about ten miles of the road between Fond du Lac and Oshkosh was already completed, although not worked, and the road bed for the remaining distance, about eight miles, was graded, and the ties on the ground ready for the rails. A failure to complete this section of the road would be attended with the loss of the land grants—hence its importance; the question, therefore, was how should the required amount of \$50,000 be raised. As the eight per cent. or Land Grant bondholders were the most interested in the matter, it was suggested that they subscribe the amount. Their securities would be increased on obtaining the grant to the extent of the value of the land, which, at \$5 per acre, would amount to about \$750,000; beside which the road from Fond du Lac to Oshkosh would be worth at least \$500,000 more. Mr. Ashley followed with a few appropriate remarks setting forth to the bondholders, especially those holding the second mortgage bonds, the importance to their own interests, of completing the road to Oshkosh not only on account of securing the land grant, but also of enhancing the value of the lower section of the road upon which they hold their second mortgage. He concluded by offering the following resolution, which was unanimously adopted:

Resolved, That in the opinion of this meeting it is highly important that the Land Grant portion of this road, between Fond du Lac and Oshkosh, be completed at the earliest practicable day, and that the Land Grant bondholders be applied to to furnish the sum of \$50,000.

Therefore, moved and seconded, that a Committee of three be appointed to solicit the aid required to complete the Land Grant portion, from Fond du Lac to Oshkosh, from the Land Grant bondholders.

Messrs. W. B. Ogden, O. D. Ashley, and S. J. Tilden were appointed that Committee. — *Chicago Railroad Register*.

FLUES FOR LOCOMOTIVE BOILERS.

The United States Railroad and Mining Register says:

In reference to the subjoined circular, we would remark that, before copying it into our columns, we submitted it to the judgment of a disinterested person, ripe in experience and in information in all that pertains to the locomotive, both in its construction and in its use, and who gave the preference claimed for the iron over the copper flue, his unqualified endorsement, when provided with the "safe ends."

We understand that at the celebrated Locomotive Works of R. Norris & Son, of this city, it is the practice to insert a ferrule made of copper, between the flue and the tube sheet, the head of the flue covering the ferrule, which, by reason of the greater expansibility of copper, acts as a wedge and keeps the flue tight in its place, when the boiler is heated.

This happy thought and efficient improvement originated with Mr. Thomas Evans, long Master Machinist on the Hazleton Railroad:

"To Master Mechanics and Superintendents of Railroads and Locomotive Builders:—We wish to call attention to the use of Iron Flues for Locomotive Boilers as they are now made with the addition of our 'Safe Ends.'"

"The principal drawback, heretofore, to the use of Iron Flues in place of copper, was—while they were made of iron sufficiently thin to transmit heat as readily through them to the water as the copper flues, the metal where they connect with the tube sheet was too thin to bear riveting to make such a joint as to stand the constant jar of the engine and unequal expansion and contraction of the boiler, which caused the flues to be continually leaking; for a while this difficulty was partially overcome by brazing copper ends to the iron tubes, but owing to time and expense of putting these ends to the flues, together with its unreliability when finished, the plan is being abandoned, and the Iron Safe Ends adopted in its stead. These ends which we weld to the flue, being of thicker iron than the body of the flues, give them the requisite increased strength when riveted at the tube sheet, which place, in addition to having to stand riveting, is also the first to be cut out by the action of the fire.

Another advantage of Safe Ended flues, consists in the ease with which they can be set in the boiler. All boiler makers are aware of the necessity of having flues to fit exactly in the hole in the tube sheet, in order to insure a good job, and also the difficulty of passing the flue through such a hole, owing to the slight inequalities in its diameter; now, by having the ends made slightly larger, say 1-16th of an inch in diameter than the body of the flue, and having the tube sheet drilled accordingly, the tubes can be put in their places with ease, and when in, will fit so as to require but little expanding to make a tight joint.

"We subjoin a statement of comparative cost of copper and iron flues:

Say 112 flues iron, 2 inches outside diameter, each 12 feet long = 1,344 feet at 30 cents..... \$403 20
224 Safe Ends, at 18 cents..... 40 32

Total cost of iron flues..... \$443 52

112 Copper Flues, 2 inches outside diameter, each 12 feet long, No. 14, weighing 2,68 lbs., at 42 cents..... \$1,128 96

"Referring you to our list of prices, and soliciting a share of your favors,

"We are, respectfully,

"MORRIS, TASKER & Co.,

"Pascal Iron Works."

Philadelphia, June 1, 1858.

PROGRESS OF THE COAL TRADE.

The statistics of the coal trade for thirty-two years show a remarkable increase in the amount and value of the production of coal. At the present time the value of the coal annually mined in this country is nearly equal to the yearly production of gold in California. And at the present rate of increase, the coal crops will soon be of greater value. It appears that in 1820, the first year in which coal was mined in our State, the amount of production was but three hundred and sixty-five tons all told. The advance to the present time may be judged by the increase at the respective intervals marked below:

Production in 1825.....	34,883 tons.
" 1830.....	174,704 "
" 1835.....	560,758 "
" 1840.....	805,414 "
" 1845.....	2,023,052 "
" 1850.....	3,302,614 "
" 1857.....	7,868,948 "

We now are but at the beginning of the development of our gigantic national resources, and the present amount of coal sent to market from our own immediate coal fields will, fifty years hence, appear as inconsiderable as the amount sent twenty-five years ago does to us now. Great Britain, with an area of coal, deposits less than 12,000 square miles and a population of about thirty million inhabitants, raises at the present time nearly sixty-eight millions of tons. In the next twenty years the population of the United will not be less than fifty millions. The area of coal-fields, as at present traced, exceeds 133,000 square miles. Is there any improbability in the inference that, with full development of these coal-fields, the annual production in the short period of the next twenty years, will be proportionate to that of Great Britain, and that it thus may be made to reach, if demanded, the enormous amount of seven hundred and fifty millions of tons.—*Courier and Enquirer*.

STEAM FIRE ENGINES FOR BOSTON.

We once stated that the reason why Steam Fire Engines were not adopted by the Boston city government was, "that they could not vote." We can tell those gentlemen who are preventing the use of steam machinery for extinguishing fires, that they will find, though the steam fire engine can not vote, there are a large class of citizens who can and will vote the opponents of these engines out of office. One pound of coal can make steam enough to do more work or lift more weight than an able-bodied man can do in twelve hours. Then why not use the coal? It costs less than one-fourth of a cent per pound, and does more work in lifting water than a man possibly can in twelve hours. Think what a saving of human bones, muscles, and health and strength by using the coal and the steam. The steam engine never tires,—it works on hour after hour and day after day, doing its set task, requiring only a little of human service to direct its labor intelligently, beneficially, and asking no reward and receiving very little care. An extensive conflagration often tasks the strength of a whole community, and after hours of the hardest human labor the effort to save property has been made in vain, the fire sweeps every thing in its way. It has been the common remark of engineers that machinery

is far more easily directed and controlled than men—and how true it is! A steam fire engine can easily be built in a compact form that could pour four times the amount of water upon a fire that one of our fire engines, worked by human power, can do, and this amount of work can be kept up hour after hour, and, if needed, day after day, until a whole town or city is deluged with water. We are applying steam power to all kinds of rough work, requiring great power in emergencies,—then why not apply it when the city is on fire and when thousands and millions of dollars worth of property are in danger of being burned? There is no reason,—only the steam fire engine can not vote? Let the citizens and tax payers of Boston, and of every other large city and town, vote for the steam fire engines, even if they have to vote against the huckstering municipal politicians, who, for the sake of the vote of the firemen for some petty office, are preventing the adoption of a most useful and beneficent invention.—*American Railway Times, Boston*.

☞ The stockholders of the Galena and Chicago Unron Railroad, held their annual meeting at Chicago, on Wednesday. Resolutions were adopted making it illegal for the Directors to transact any business creating liabilities, not strictly connected with the legitimate operations of the road, without the express authority of stockholders, to be conferred by a regular meeting or a meeting called for that purpose. There is a general determination on the part of stockholders to build a legal wall around Directors. These officers need to be walled in. The following gentlemen were elected Directors for the ensuing year:

John B. Turner, Walter L. Newbury, Charles Walker, William H. Brown, Benjamin W. Raymond, Benjamin F. Carver, Hugh T. Dickey, William J. McAlpine, Orrington Lunt, Horatio G. Loomis, Thomas D. Robertson, Dexter A. Knowlton, Charles L. Hempstead.

MICHIGAN CENTRAL AND MICHIGAN SOUTHERN RAILROADS.—It is known, says the *Trois Free Press*, that a compact was entered into in the early part of this Spring, by which the Michigan Central and Michigan Southern Railroads effected a consolidation of interests, and abolished the system of paid and regularly salaried ticket agents. This arrangement is effected by a division of the surplus receipts on through passenger and freight traffic. The one which has the largest amount then delivers to the other fifty per cent. of the surplus, after deducting twenty per cent. for running expenses. As the receipts of the Michigan Central are much greater on passenger travel, some thousands of dollars pass into the hands of the Michigan Southern at the end of each month. The latter is in excess on freight receipts, but not nearly as much so as the Central on passenger receipts, and the arrangement consequently works very much to the advantage of the Southern Road. The diminution in outside expenses is so great, however, that it is a money saving operation on both sides, as no effort is required to direct passenger travel over either route, neither caring which gets the surplus.

☞ The wine crop of Austria is 1,600,000-000 of gallons, equal to about 25 gallons per head of its 60,000,000 of inhabitants.

CULTURE OF THE VINE IN THE S. W. ALLEGHANIES.—No. 2.

DAVID CHRISTY.

Remarks.—Probable Exemption of the Grape from Mildew and Rot in the S. W. Alleghenies—Adaptation of their Soils to the Production of the Best Flavored Wines—The Extent of Territory adapted to Grape Culture which they will afford—Mr. Guerin's Letter.

Nations, states, or sections of country, can not become eminently commercial, except where their agricultural, manufacturing, or mineral resources afford an ample basis of operations for capital and labor. The South has already demonstrated the agricultural capacity of her lowlands, and has thereby made the manufactures and commerce of Christendom her tributaries. It only remains that she shall develop the resources of her highlands, to enable her to add immensely to her power over the trade and commerce of the world. This latter region, constituting an extensive range of mountain lands, has thus far been productive of little wealth, with the exception of the gold it has yielded. Enough is known of it, however, to give fair promise in the future of rich rewards to capital and labor. Its mineral wealth, doubtless, is inexhaustible; but as the ores are limited to a few ranges of metallic veins, much of the territory can be valuable only for grapes and fruits, or for pasturage and timber.

The general question of the present condition of the production of wine, has been discussed in the preceding chapter; and the adaptation of the South-western Alleghenies to the cultivation of the Grape, has been referred to in the article on the "Climatology of North Carolina." From the first of these investigations it appears, that the commercial demand for wine is such as to give promise that its production will become a lucrative business; and from the second, that the highlands of the South approach more nearly, in humidity and temperature, to the vine districts of Europe, than any other portions of the Union eastward of California. The following points remain to be examined: the probable exemption of the grape, in these mountains, from the *mildew* and *rot* which elsewhere renders the crop so precarious; the adaptation of their soils to the production of the best flavored wines; the extent of territory adapted to grape culture which they will afford.

To arrive at a just conclusion, as to the conditions of soil and climate indispensable to the healthful growth of the grape, it is necessary to consider the causes of its destruction. *Mildew* and *rot* seem to be its most potent enemies. To the naked eye the mildew appears like an impalpable powder, covering the grape partially or wholly, and at times extends to the growing short leaves and stems. Under the microscope it proves to be a *Fungus*, coating the surface as with a forest of white pines. The development of these miniature trees, from the seed to the perfect tree yielding its seed again, occupies but about twelve hours. The branches of the fungus, when full grown, are numerous subdivided and beset with myriads of microscopic spores, or germs, which are readily detached by the wind and fill the air with invisible but reproductive elements.*

The first occurrence of the mildew is at the time when the vine has just shed its blossoms and the grapes have been formed; its continuance is only as long as the cuticle of the grape remains tender and capable of being

penetrated by the rootlets of the fungus; and its effect is the destruction of all the berries over which it spreads to any considerable extent. The grapes, in all such cases, cease to grow, turn black, and fall off.†

The circumstances under which mildew appears are worthy of special note. They include *temperature*, *humidity*, *altitude*. Around Cincinnati the elevation of the hills is from three hundred to four hundred feet. The mildew was more destructive to the Grape, in 1857, than at almost any former period. The lowest portion of the vineyards was more affected than the highest, and the intermediate part much more than the lowest. "In certain localities, exposed to a dry and free circulation of air, the grape often escapes in seasons of the most unfavorable character."‡ The first appearance of the mildew, last year, was during warm rainy weather. It ceased to spread when the air became clear and breezy, but re-appeared again and increased with the recurrence of warm rains.‡

From this statement of facts it would appear, that in the development of mildew there must be a high temperature, a great amount of humidity, and no very considerable elevation above the valleys. The height of the hills at Cincinnati is so inconsiderable as to afford no proper opportunity of testing the question, whether an elevation may not exist that will exempt the grape entirely from mildew. That such an altitude does exist, is rendered probable from the fact, that, in Cincinnati, the vines on the highest grounds suffer the least, and certain airy localities, even in the worst seasons, escape it altogether. The same laws seem to have controlled the customs elsewhere. At El Paso, and at Parras, in Mexico, superior vine districts exist: but both these places are at four thousand to five thousand feet above the sea, and at lower positions in Mexico the grape is not grown.* The first efforts at grape culture, near Vinona, in the Southern Highlands, were unsuccessful. The foreign vines were planted, and the valleys and hill sides chosen as the sites of the vineyards. But complete success did not crown the efforts of the little colony, till, under the direction of Mr. N. E. Guerin,† they planted the native grapes, and selected elevations from six hundred to eleven hundred feet above the Ocoee river, or one thousand eight hundred to two thousand three hundred above the Atlantic. At Louisa, Kentucky, on Big Sandy river, Judge Rice has a small vineyard in bearing. It is planted upon sandy lands but little elevated above the river. The *rot* injured his crop year before last, and in the winter following the vines were killed to the ground by frost. Another vineyard was planted in the Highlands, eight miles distant from Louisa, which always produced well, and never suffered from mildew or *rot*; but it is now neglected and going to ruin, in consequence of the failure in business of the gentleman who planted it.

What is true of mildew, is true also of what is called the *black rot*. These two diseases are distinct, but their effects the same—the destruction of the grape. The *rot* appears at a later period than mildew, and after the cuticle of the berry has become thickened and condensed. It has always succeeded the

mildew, but has also made its appearance without that sure precursor, and often destroyed almost the entire crop, especially in unfavorable localities. The *rot* is also caused by a fungus, the fibers of which are found penetrating the interior of the grape; and, in its own progress to maturity, exhausting the vital energies of the fruit of the vine. Its presence is indicated by a small bluish tint on the surface of the grape; but whether the spores of the fungus enter the circulation from the water around the roots of the vine, as the ova of certain worms must pass through the circulation of the mother to reach the intestines of the offspring; or whether they penetrate the interior from the atmosphere, through the surface, are yet mysteries in vegetable physiology. It seems, however, that the germs of the fungus which produce black rot, like those of the mildew, require certain atmospheric conditions for their development, which only prevail in certain localities and under peculiar circumstances, that may not exist every where.

Another question must here be considered. A difference of opinion prevails as to the condition of the grape, at the moment preceding the germination of the mildew and rot. Some believe that *Fungi* never grow upon healthy vegetable tissues, and that the grape must first become diseased before the fungus can grow upon it. Others consider that this view is certainly a mistake, because the grapes attacked by mildew and rot are always those of the most healthy and vigorous growth, and only begin to decay when the fungus appears upon them. It is replied, that this vigor of growth is not a healthy one, but the result of morbid action, produced, probably, by an excess of fertilizing elements in the soils. This result is believed to be due to an erroneous practice, long prevalent, of plying the vineyard soils to excess with rich manures, so that a vigorous growth of the vines might be promoted, and early and abundant vintages secured. In limestone countries, like that around Cincinnati, an excess of lime is always present in the soils, to transform, promptly, the fertilizing elements of the manures into food for the vines, and their morbid growth and premature decay is supposed to be the result. As increased temperature, in such cases, always promotes chemical action, and the presence of moisture leaves nothing lacking to hasten the effect, the concurrence of warm weather and rains must necessarily crowd upon the rootlets of the vines an excess of aliment, which, according to this theory, will be productive of disastrous consequences. This extra forcing of the growth of the grape during periods of high temperature and excessive humidity, is believed to result in the rupturing of the vessicles containing its juices. The fluids thus set free within the berry, can not but be subject to fermentation. When the cuticle of the grape is tender, the germs of the mildew find the elements of growth in the decaying materials in contact with the inner surface; and when it is hardened by age, those of the black rot, entering the interior as they may, are equally certain of a rich supply of food to complete their development.

The controversy upon this subject can not be settled, except by additional investigation. The application of sulphur has been found beneficial, but whether it destroys the fungus and saves the grape, or whether it gives health to the grape and thus prevents the germination of the fungus, are questions to be settled in the future. Nor need the mountain men

† Dr. L. Mosher's Reports.

‡ Ibid.

* Blodgett's Climatology, p. 444.

† See Mr. Guerin's letter in a subsequent chapter. Vinona is upon the Frog Mountains, a portion of the Smoky Mountain Range, and near Ocoee river.

* Reports of Dr. L. Mosher, in *Cincinnati*.

grieve over this state of things, as it matters little to them which way it shall be determined. This is no idle remark. The mildew appears upon the grape only during periods of much humidity of atmosphere and increase of temperature; and it is produced under no other circumstances. From this it may be inferred, that the natural *habitat* of this fungus must be in situations where an excess of heat and moisture prevails. Such localities, of course, exist only in the vicinity of ponds and low marshy grounds. Its seed, microscopically minute, rises in the rarified atmosphere till the cooler air prevents its farther ascent, or else it is wafted by the winds to the hill slopes, or borne upward by the ascending vapor, as driftwood is borne along by running streams. Coming into contact, there, with the moistened surface of the tender grape, at the moment when the temperature is high enough to favor its germination, the fungus springs into life and maturity at the expense of the death of the grape.

Now should the mildew be found to have such an origin as is here suggested, and we see not that it can be otherwise, then, sections of country destitute of marshes and ponds, or out of the range of winds passing over such localities, must escape the infection. The mountain ranges of the South, therefore, rising high above the valleys, and being far distant from marshes and ponds, can scarcely ever be reached by the floating germs of the fungus; and even if its seed should be carried to a high altitude, occasionally, the cool airy character of the atmosphere which it would penetrate, must afford but a doubtful chance for it to germinate.† This view of the subject is sustained by the practical results obtained by Mr. Guerin.

But should it be found that the mildew is not the cause of the destruction of the grape, but only an indication that its vitality has been already impaired by internal causes, then will there be a still greater certainty of the success of the vine in the Southern Highlands; because their soils are of such a nature as to ensure against morbid growth, from excess of fertility, due to the presence of too great a proportion of manures and lime.

† See the article on "Fog and Rain" for altitude.

AMERICAN CREDIT IN GERMANY.—Late arrivals bring news of a decided increase in the ill feeling existing in Germany caused by the heavy defaults which have been made in the interest of railroad bonds in this country. An organization is talked of among creditors to obtain justice. We do not see how redress is to be obtained, except through some action in the U. S. Courts: yet the action will have a disastrous effect upon all American state or railway credit. The Germans hold fifteen millions of N. Y. and E. securities, which will, of course, set back upon this country as fast as the market will bear them. This state of things abroad is much to be regretted.

The Western roads generally have suspended issuing coupon tickets to New York until some settled policy be adopted in the matter. Through tickets to Buffalo or Dunkirk only are sold by all the roads.

The Worcester and Nashua Railroad has declared a semi-annual dividend of \$2 per share, payable July 12. This Railroad was opened for business December 18th, 1843. From that time to January last there had been paid to holders of stock, in dividends, \$30 25 upon each share. There had also been paid from the net profits of the road, in payment of the Company's debts, \$111,878 24, leaving a surplus, not divided, of \$32,618 88.

NEW CEMENT.—The *Cosmos* speaks well of a new cement prepared by M. Edmund Davy, by melting in an iron pot; equal parts of common pitch and gutta percha. It is kept either liquid under water, or solid to be melted when wanted. It is water proof and adheres firmly to wood, glass, stone, leather, cloth, &c., and even to varnish.

The earnings of the Pennsylvania Central Railroad for May were:

	Gross Earnings.	Expenses.	Net Earnings.
May, 1858.....	\$480,476 92	\$260,778 29	\$219,698 33
May, 1857.....	405,533 07	264,657 34	140,893 69

Increase.....	74,928 55		78,802 64
Decrease.....		3,879 09	

From Jan. 1 to

June 1, 1858.....	\$2,197,926 25	1,203,247 69	994,678 56
" last year.....	2,204,300 59	1,366,637 55	807,663 04

Increase.....			157,915 52
Decrease.....	6,374 31	163,359 56	

The earnings of the Pittsburgh, Fort Wayne & Chicago Railroad Company during the month of May were as follows:

From Freight.....	\$43,773 17
" Passengers.....	60,811 96
" Mails.....	4,482 29
" Rent of Road.....	5,500 00
" Miscellaneous.....	164 36
Total.....	\$114,731 77

Earnings during same month last year..... 130,587 15

Decrease (12 per cent.)..... 15,855 38

The expenses in May were as follows, viz:

Station Expenses.....	\$ 6,564 87
Cost of Running.....	21,216 65
General Expenses.....	13,526 20
Repairs of Machinery.....	16,373 76
" Track and Roadway.....	19,028 68
" Structures.....	1,643 49
Total.....	\$78,365 65

Expenses in same month last year..... 94,270 04

Decrease (17 per cent.)..... \$15,904 39

Net Earnings in May, 1857.....	\$36,317 11
" 1858.....	36,366 12

Increase of net Earnings..... \$49 01
T. D. MESSLER, Auditor.

The earnings of the Chicago, Burlington and Quincy Railroad Co. in May were as follows:

	Freight.	Passengers.	Mail & Miscel.	Total.
1857.....	\$106,115 27	\$40,858 96	\$1,926 19	\$148,900 42
1858.....	57,961 14	28,191 68	1,488 33	87,641 15

Decrease..... \$42,144 13 \$12,667 28 \$497 66 \$55,309 27

SALES AT THE NEW-YORK STOCK BOARD—June 21.

\$10,000 Misso. 6's.....	87½
82,100 do.....	87½
5,000 Tenn. State 6's, '90.....	93¼
2,000 North Car. State 6's.....	97½
5,000 Harlem 3d Mt. Bonds.....	59
10,000 Mich. C. 8. p. c.....	93
2,000 Illinois Central R. R. Bonds.....	84¾
7,500 do do do.....	85
5,000 Ill. F. B.....	83
1,000 Terre Haute and Alton 2d mort. Bonds.....	43
2,000 La C. & Mil. L. Gt. Bs.....	33½
10,000 Virginia 6's.....	96
300 Shares New York Central.....	82¼
100 " Pacific Mail St. Co.....	75¾
100 " Chicago & Rock Island.....	72
35 " Milwaukee & Miss.....	20
212 " Hud. River R. R.....	27
16 " Harlem R. R.....	10½
20 " Second Avenue R. R.....	90
100 " Reading.....	45
50 " Mich. Cent.....	54
82 " Mich. S. & N. Ind. pref.....	43
10 " Panama.....	109
10 " Clev., Col. & Cin. R. R.....	92¾
100 " Galena & Chicago.....	85
200 " Cleveland & Toledo.....	33¼
50 " LaCrosse & Milwaukee.....	6½
100 " Erie R. R.....	17

PHILADELPHIA RAILROAD.—The following were the receipts of the Philadelphia, Wilmington & Baltimore Railroad Co., for the month of May, as compared with same month last year:

Receipts for May, 1858.....	\$94,620 54
Do. do. 1857.....	89,620 85

Increase in favor of May, 1858..... \$ 4,999 69

This looks well, especially when compared with the business of so many other Railway Companies, the revenues of which are largely less than in corresponding time last year.

MONETARY AND COMMERCIAL.

The money market for the past week has not materially changed. Capital is abundant, and good paper is readily negotiated at 8 to 12 per cent., the medium of the two being the ruling rate. The slight disposition to speculate in produce and its products upon the imaginary chances of short crops, has been abated by the past ten days of extremely favorable weather. It is now given up even by the worst of croakers, that there probably will be nearly an average crop of every thing, rendering it unsafe to speculate. Every department of business partakes of this apathy, and there will be but little business done before fall, hence we may reasonably expect, that there will be not only a continued, but an increased plethora in the money market.

The Price Current says:

The Branches of the State Bank of Ohio have made decided progress toward the establishment of a Clearing House in this city, upon the plan recently proposed by the convention of the Indiana, Kentucky and Ohio bankers, held in this city, the movements of which were suddenly terminated by the discovery of a legal difficulty, in the way of locating an agency of a foreign bank in this State. The Indiana banks, and a portion of the Kentucky banks, will doubtless co-operate with the Ohio banks in this undertaking, so as to make it in fact a clearing house, for the leading institutions whose circulation centers at this place. The capital has been fixed at half a million, a portion of which is left to be subscribed in this city.

The business men of Cincinnati will receive with pleasure this information, with reference to the establishment of an institution, the effect of which, must be, if successful, to reduce the bank note currency of the West, to a specie standard, and thus remove the severe burthen that merchants have been compelled to sustain in the shape of excessive rates of premium for exchange.

We subjoin quotations from Hewson and Holmes' Stock Circular:

Dullness has been the prevailing feature in the Stock Market during the past week, and except in the securities of our two leading roads, the transactions have been small, but at about the same figures noticed in our last circular.

An advance of 1 to 2 per cent. has been realised in Cincinnati, Hamilton & Dayton 2d Mortgage Bonds, and from 2 to 3 per cent. in the 1st Mortgage Bonds of the Little Miami Railroad Co., sales having been made of the latter at 81 and interest, they are generally held higher, say 82½ to 85. A sale of \$140,000 of these very popular securities has been made in New York within a day or two, but the price has not yet transpired. The nett earnings of this road for the past six months ending 1st of June, after paying a 4 per cent. cash dividend, to be declared in all this week, will show a surplus of \$40,000.

We quote sales of Little Miami Shares at 74 ex-dividend. Cincinnati, Hamilton and Dayton at 40. In Indianapolis & Cincinnati there have been no transactions, 35 being the highest price offered, while there are no sellers under 40. There is no good reason for the reduction demanded as the Road is doing a good business.

The Exchange Market is dull, with a lim-

ited demand, but with no change in rates. New York, Boston, Philadelphia and Baltimore, sight 3-8 to 5-8 prem. New Orleans $\frac{1}{4}$ dis. to $\frac{1}{4}$ prem. St. Louis par to $\frac{1}{4}$ prem., payable in specie. Gold in moderate request at $\frac{1}{4}$ to 5-8 prem.

Money is abundant and can be obtained readily on first class business paper at 8 to 10 per cent. Mortgage paper 10 to 12 per cent.

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,
MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE
BY HEWSON AND HOLMES,

June 29, 1858.

BONDS.

\$8,000 Cin., Ham. & Day. R. R. Co. 7 per cent. 2d Mort. Bonds.....	71
\$3,000 Cin., Ham. & Day. R. R. Co. 7 per cent. 2d Mort. Bonds.....	72
\$6,000 Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	50
\$2,000 Cov. & Lex. R. R. Co. 7 per cent. 3d Mort. Bonds.....	36
\$1,000 Cin., Ham. & Day. R. R. Co. 7 per cent. 1st Mort. Bonds.....	85 and int.
\$5,000 City of Louisville 6 per cent. Bonds.....	65
\$2,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	74
\$4,000 Cincinnati & Chicago R. R. Co. 8 per cent. Real Estate Bonds. Geo. Milne, Trustee.....	124
\$1,000 City of Cincinnati 6 per cent. Bonds.....	85
\$3,000 Col. & Xenia R. R. Co. 7 per cent. Div'd Bonds, due 1860.....	90
\$6,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	81
\$2,000 Ohio & Mississippi R. R. Co., 7 per cent. Construction Bonds.....	25

STOCKS

94 Shares Little Miami R. R., ex-div'd...	74
50 " Cin'ti., Hamilton & Dayton.....	40
200 " Ohio & Miss. R. R.....	5
36 " Dayton & Western.....	15
70 " Washington Insurance Co.....	100
40 " Cincinnati Fuel Co.....	80

1,200 Kegs No. 1 Railroad Spikes, $\frac{5}{8}$ by 9-16th, Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERG,
7 Public Landing.

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by SEVENS & JENKINS, Covington, Ky. These rails have decided advantages over ANY RAIL hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEVENS,
Cincinnati Ohio.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

E. T. WOODRUFF,
G. R. DYKEMAN, Alton Ill.
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE. INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of Cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonsville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURG.

Through Tickets good until used. may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
no13 10 Wal ar Broadway, New York.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases. ap16

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup'l.
Racine, May 15, 1857.

H. S. DURAND, President.
my21

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard:
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jjy23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,

Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

oc129-6m

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy. 27. RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb5-ly

IRON BOILER FLUES
PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

6 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 209 South Third St.,

PHILADELPHIA.

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STEPHEN MORRIS,

THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,

S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

I. H. GOODMAN & CO.,

Feb. 7. '56-2m.]

no. 7 Wall St., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,

ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, or from our regular business, respectfully solicited.

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

JOEL C. LANE

feb4tt

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trestling R. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging—44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860. W. M. B. MUNFORD, President. Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars, Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market St.,

1 n24 NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

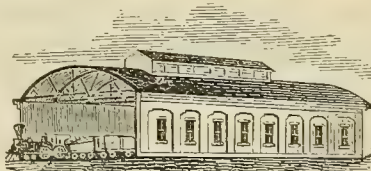
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third Street, Cincinnati, O.

may13.

MOSELEY & CO.

DAVENPORT... M.D. WELLMAN... C.M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 167*

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

Nov

64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C

april2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

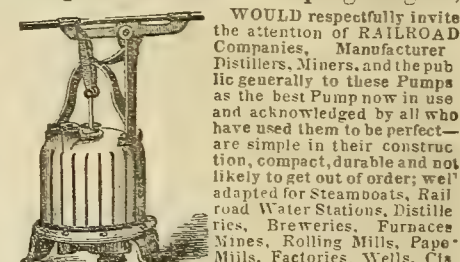
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—'y

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, tf.

VOSE, LIVINGSTON & CO.,

9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY, (Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

☞ FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

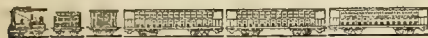
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And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

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CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

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10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

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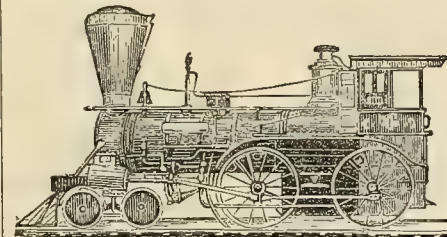
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E. F. FULLER, General Ticket Agent. my13

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ON TUESDAY, MARCH 18TH, AND UNTIL FURTHER notice, the Trains will depart from Mill street station as follows:

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FOR INDIANAPOLIS—At 6 A. M. and 2:20 P. M.
FOR LAWRENCEBURG AND AURORA—At 5:45 P. M.

FREIGHT—For Louisville, Indianapolis, Peru, Chicago, Terre Haute, Vincennes, Evansville, and all intermediate stations, at 5:30 P. M.

For further information in regard to Freight, apply at the Station on West Front, near foot of Columbia Street.

For TICKETS apply at offices, No. 2 Burnet House; Station on West Front Street, or to the offices of the Indianapolis and Cincinnati Railroad Co.

W. J. STEVENS,

Acting Superintendent.

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Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:00 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

OFFICE OF PITTSBURG AND CONNELLSVILLE R. R. Co. }
Pittsburg, May 18, 1858. }

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connelville Railroad Company, in the city of Pittsburg, until the 15th of June next, inclusive, for the GRADUATION, MASONRY, BRIDGING, TRESTLING, STATION BUILDINGS AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles along the Monongahela River, between Pittsburg and Port Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the First Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all, the coming autumn.

By order of the Board of Directors.

ma27:3w

BENJ. H. LATROBE, Pres

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Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

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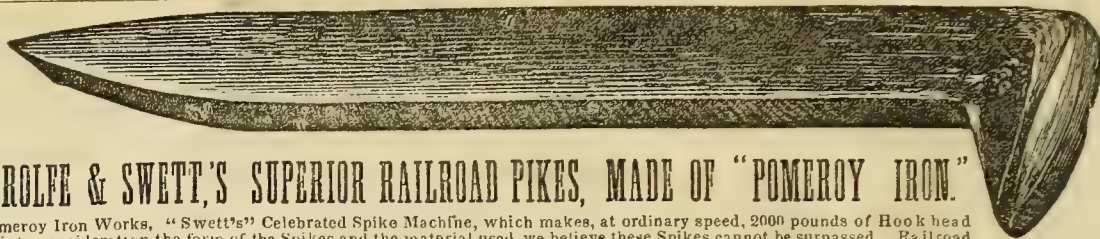
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JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Au16.ly



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LOCO-
MOTIVE  **AND CAR**
SPRING

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I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

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THOMAS DOUGHERTY, Master Mach. do.

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Most Reasonable Terms.

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PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

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CONTENTS.—Lotteries, Gift Enterprises, Employment Offices, Partnership Swindlers, Bogus Ticket Offices, Confidence Women, She Sharks, Indignant Husband Dodge, Hackmen, Hotels, etc. Price, 10 cts. (All sent free by mail.)

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:
THURSDAY MORNING, JULY 1, 1858.

Railroad Record

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GRAND JUNCTION RAILWAY.—At the annual meeting of the Grand Junction Railway Co., held on the 14th inst., the President, David Kimball, Esq., in the Chair, the report of the Directors was read and accepted. The following gentlemen were elected directors for the ensuing year: David Kimball, S. S. Lewis, Samuel Hooper, Benjamin Lamson, George A. Whitney, Genery Twichell, A. A. Wellington.

The La Crosse and Milwaukee Railroad is now open, and trains are running to Greenfield, or the Tunnel station, which is only 38 miles from La Crosse.

VOL. 6.—No. 19

STEAM POWER—HORSE POWER—AND MAN POWER—THE UNIT.

In all departments of human industry, there is one constant problem to be solved, under innumerable variations of circumstances. This is—"Under a given state of things, what is the greatest power to be got at the same expense?" Now it is plain, that the solution of this problem may be made in a great many different ways, according to the condition of things. In the first place, it is quite obvious that for a multitude of industrial employments, involving minute manipulations, nothing can be substituted for the human hand. These are almost entirely, however, employments which require but little strength. When, on the other hand, we come to a sort of work which requires great strength or power, and little or no skill, the case is entirely reversed. An animal, or a moving machine which has great power, will far surpass the human hand, and be proportionably cheaper. Such is the case with the raising of great weights, the moving of heavy machinery, and the propulsion of vessels. Here the substitution of the horse, the mill-dam, or the steam engine, is immensely profitable. The feeding of the horse, or fuel for the steam engine, costs far less than the support of human beings to do the same work. Besides this, there is another great gain in the saving of time, which to the human being, is the element of greatest value. It is in the use of machinery that the difference between the industry and economy of ancient and modern nations is chiefly found. The builders of the Egyptian Pyramids brought immense stones from quarries on the Nile, at a great distance off, and then laid them in layers, gradually diminishing for six hundred feet in height. This was done by human labor, and the simple mechanical powers. Now, if the Egyptians had gunpowder to blast the rocks; steamboats to carry them on the Nile; steam saws to cut them; and steam power to lift them into place, the building of the great Pyramid would not have required one-tenth the time or labor expended upon it. Indeed, this may possibly be one reason why this kind of work is now seldom attempted; for, men know that a monument of mere magnitude or strength would not now signalize the genius and grandeur of man. It would be a mere witness to the power of steam. Hence, it is not the dead monument of stone, but the magnificent steamer; the life energizing railroad; the arts and machinery of living society, which are now brought forth as the evidence of human genius, and the monuments of glory past.

Notwithstanding the introduction of this machinery, the old power of the human hand and the strong horse are still employed in a thousand ways; and, indeed, the introduction of machinery seems to require more aid from

these. It is a singular fact, that horses have not diminished in number or value since railroads were introduced, although tens of thousands of horses would be required to do the mere freight transportation, which they do in Ohio. On the contrary, horse power is in more demand than ever, and human power more valuable.

In this common use of human, animal, and steam power, it is very desirable to find some common measure—a unit of power. It is little matter whether it is an exact measure of any thing, provided it is something which will answer, as a unit, measuring the relations between them. We have never yet got an exact measure of length; but a foot rule answers, practically, just as well to determine heights and distances. An exact measure is like a first proposition in Metaphysics—a thing yet to be found out. In the mean time, what is called a "horse power," seems in Mechanics to be used as a measure of power. But, what is a horse power? Horses are as variable as men. To ascertain this, experiments were made with the common work horse, with the following result: "The average motive force (see Allen on the Mechanics of Nature,) exerted by a work horse of ordinary strength, has been found to be adequate to lifting a weight of 100 pounds, suspended by a rope passing over a pulley, whilst the animal travels forward with a regular speed of little more than two and a half miles per hour, or more precisely 220 feet per minute. This extent of physical force a horse is capable of exerting about eight hours per day."

This reduced to an effective motive power, gives the *actual capacity* of a working horse to be equivalent to raising 22,000 lbs. one foot high.

This was assumed as a unit of power; but one of the original inventors of steam engines to prevent any disappointment in those who purchased his engines, as a substitute for horses, added about one-half of this result; so that Boulton and Watt, in their calculations for the *horse power* of steam engines, assumed the conventional standard of 33,000 lbs. one foot high for the measurement of power, and they calculated their engine to operate twelve hours per day, in accordance with the limits of human labor. Now, as the *actual* horse power was at the rate of 22,000 lbs. per minute for eight hours, it was just equal to raising 10,560,000 lbs. one foot high in one day. But *steam horse power* being 33,000 lbs. per minute for twelve hours per day, was equal to 23,760,000 lbs. raised one foot high per day. Thus a horse must work 2 7-8th days, at eight hours per day, to actual the work of a steam horse power in one day.

Now, this being the case, and we having the proposition of 2 7-8th days of a horse to

one day of a steam horse power, we can calculate the relative cost of each.

Mr. Allen says, that a horse consumes 31 lbs. of carbon and hydrogen per day, and the furnace of a one horse steam, 96 lbs. of organic carbon per day. He then calculates the cost thus:

13 lbs. of hay, per day, for 27-8th days, equal to 37 lbs....	28 cents.
One peck of Indian Corn, per day, do....	35 "
Cost of organic carbon, as food for a horse, equivalent to steam horse power.....	63 "
96 lbs. of mineral coal, at \$5.00 per ton of 2,000 lbs., per horse power engine per day.....	24 "
Saving, by steam power, per day....	39 "

This estimate is made for the cost of coal on the sea-board, but the cost in Ohio is not near so much. In the valley of the Ohio, where coal is cheap, steam power is greatly superior to any other, both in efficacy and economy. The Commissioner of Statistics estimates, from actual returns, 3,000 steam engines at work in Ohio. These engines average about twelve horse power, giving in the total 36,000 horse power; or, according to Mr. Allen, 103,500 *actual horse power*; or, at thirteen cents per day saving on the real horses, is equivalent to more than \$4,000,000 per annum! But this is only one aspect of the case. Undoubtedly the saving in time and human labor is vastly greater. This steam power does the work of about 700,000 men! If we suppose the present industry of the State required 700,000 more men than it has, where would be the prosperity of the State? For to require so many more men to do the present work performed by machinery, is equivalent to *diminishing* the actual industry of the State, by so much.

The actual power of the human race is so multiplied by machinery, that we can not set limits to what it may some time accomplish.

PRICES OF TRANSPORTATION.

There are many things in railway management, that are *caviare* to the multitude; but, perhaps, the most incomprehensible are those appertaining to freight tariffs.

It is said, and generally admitted, that most of the rates of freight on all our railways is below, or within a small fraction of the actual cost of transportation. Whether this be so or not, we are not prepared to say; but one thing seems quite certain that few railways in the country, though paying dividends, are in fact earning enough to pay expenses, after reserving a sufficient fund for renewal and rebuilding of track, depots, cars etc., which are wearing out with a rapidity little dreamed of by persons unacquainted with the details of railways.

A strong argument in favor of this opinion can be found in the fact that the more business roads do, the more they get in debt. Vide the recent exposures of the financial condition of the longer and older roads for-

ming the northern, great east and west lines.

It may be said that a portion of this large and increasing indebtedness is the result of mismanagement, rascality, incompetency or whatever else you may call it, on the part of the officers and directors. These, no doubt, have been at the foundation of much of the railway troubles; but we think a great deal is due to the low rates of freight over the great leading lines of road.

Now we are no advocates for higher prices than is consistent with prompt service and fair profits; but we are utterly opposed to a system of prices that is bringing ruin to the great leading interests of the day—beggering tens of thousands and enriching nobody.

Let us examine this subject for a moment.

It has been shown that the average cost of running locomotives, including repairs, drivers, stokers, fuel, oil and waste, is 21 cents per mile, and that the absolute cost of handling, loading and unloading freight is twenty-five cents per ton. Now, an ordinary train consisting of twenty cars, will have, say, 160 tons freight to be transported one hundred miles. The expenses will stand thus:

Locomotive.....	\$21
Depot service.....	40
Total.....	\$61

or a fraction over 37 cents per ton actual cost to say nothing of interest, wear and tear of track, cars, depots, etc.

Now, to build a road of say one hundred miles, stock it for business, etc., would cost not less than four millions of dollars, that the interest on which, with the expenses of superintendence, relaying track, and renewals of machinery, would not be less than 10 per cent. on say \$400,000, half of which is fairly chargeable to the freight department. If over such a road four freight trains pass per day, with an average of 160 tons freight each, making 640 tons per day—or in round numbers 200,000 tons per annum, at an actual direct cost of 37½ cents per ton, it is evident that to cover actual cost, including interest, wear and tear, etc., \$1.00 per ton additional must be charged. This is equivalent, in round numbers, to seven mills per mile, which it cost a railway, doing a large business, to transport 100 lbs. of freight. This would make the expense of carrying 100 lbs. of freight from Cincinnati to New York via the lake shore lines, say *sixty one and a quarter* cents. Now these lines are offering to carry merchandize over their roads the entire distance for 57½ cents per 100 lbs., or at a dead loss—to roads costing much less than theirs—of 3¾ cents per every hundred pounds!

Comment upon such tariff is quite unnecessary; for it will require no very profound calculation—the data being given—to determine how long it will take these roads to place themselves in the condition of the Kil-

kenny cats after the famous battle we read of.

It may be urged that this is an extreme view, that no allowance has been made for higher rates charged on other classes of merchandise, increased profitableness of passenger traffic. This is all very true. But we contend there should be no such allowance made. "Every tub should stand on its own bottom," as well in railway matters as in other departments of trade. As we understand it, railway tariffs are graduated so that a *car load* of one description of property shall pay just as much as a car load of any other kind—due allowance being made for the difference in expense of handling, risks of transportation, etc. If not so made, they are a fraud upon the community by taxing one branch of business at the expense of another.

Now this whole matter wants thorough sifting; and if our calculations are any thing like true, railway managers owe it to their stockholders, as well as the public, to bring about a speedy change. It is no kindness to the merchant to transport his goods eight hundred miles for sixty cents per hundred. Whatever he pays he charges to his customers, to whom it makes no difference whether it be sixty cents or one hundred cents, the amount in their case being so small, that it is not felt when diffused through the community. But it is all important to the railway, as well as all the great interests depending there on. The great point to be aimed at, is a tariff fully remunerative to the forwarder, equal in its application to all departments of trade, at the same time not expensive to any body. D.

☞ The Covington & Lexington Railroad Co. require \$800,000 to put the Company in good condition. The President proposes to use the earnings of the road for this purpose, and fund coupons to the amount of \$662,530 on the mortgage debt, in bonds due in four to five and a half years.

☞ There is to be a mass convention of the friends of the Cedar Valley Branch of the Chicago, Iowa and Nebraska, R. R. at Waverly, on the 15th July next, to devise plans and arrange a programme for the immediate and definite location of the Cedar Valley road, and putting under contract the grading of the same. The future policy of the Company will then be determined, and a programme fixed upon for the immediate commencement and speedy completion of the road.

LARGE RECEIPTS OF GRAIN.—The Clinton Herald says the amount of wheat received in that city by the C. I. & N. R. R., for the week ending Thursday the 15th inst., was *twenty-two thousand six hundred and ninety-eight bushels*. The amount received by wagons during the same time, is nearly nine thousand bushels. The amount of goods shipped west over the C. I. & N. R. R. are:

Merchandize, lbs.....	46,871
Agricultural Implements, lbs.....	3,331
Salt, bbls.....	220

Railroads.

CLEVELAND AND TOLEDO RAILROAD.

We learn from the Report of the Directors of this Road to the Stockholders, that the year just closed has been as prosperous to the interests of the Road as the Directors anticipated. While the business has been considerably reduced, by reason of financial troubles, &c., expenses have also been materially lessened, and now amount to but 51 per cent. of the earnings. The following is a statement of the aggregate yearly earnings since its organization:

Year ending June 1, 1855.....	\$780,820 42
" " 1856.....	961,471 15
" " 1857.....	1,144,800 79
" " 1858.....	907,263 59

The net earnings for the last year are as follows:

Gross earnings for year ending April 30th 1858.....	\$930,252 46
Deduct running expenses for the same period.....	496,462 01

Net earnings for year ending April 30, 1858.. \$433,790 45

The policy of abandoning that portion of the Northern Division between Sandusky and Clay Junction is adverted to. Frequent damages to the track in that vicinity have caused great expense, while the receipts have been small.

There are upon the road 32 locomotives and 42 passenger cars. The track and stock are represented as being in excellent condition.

The amount of the floating debt at the time of the last year's Report, June 1, 1857, was:

Bills payable at New York office.....	\$389,309 10
at Cleveland office.....	20,838 71

Total.....\$410,147 81

On Sept. 1st, 1857, at the time of the resignation of the State Treasurer, it was found that the floating debt had increased at the New York office to \$489,784 47, the amount in Cleveland remaining nearly the same as in June previous—\$22,721 89, total \$512,506 36. To this amount should be added at that time sundry credits on the books of the Company, and sundry bills and pay rolls that were unpaid, which swelled the floating debt in reality to about \$600,000.

To provide for this debt it was decided to authorize the issue of 600 of the Company's Coupon Bonds, of \$1000 each, due in 1870. Of these, 476 Bonds have been negotiated at fifty cents on the dollar. The financial difficulties of the country made it extremely difficult to negotiate the Bonds, and, under the circumstances, the result was a favorable one. The pressing liabilities have been met, the securities preserved, and the credit of the Company fully maintained. The Company's paper, its interest Coupons, and other liabilities, have been promptly met at maturity.

The total amount of the outstanding notes of the Company, June 1, 1858, is \$353,719 89. These notes extend to different periods, some as late as into February, 1859, and the interest is paid on them to their maturity. There are sundry credits of unpaid bills, dividends and interest not called for, and accounts, amounting to \$30,202 81—making the total floating debt \$383,922 70.

Proper efforts toward the the reduction of this amount are:

Cash, New York and Cleveland.....	\$28,924 48
Cash due from Post Office Department for Mail service.....	11,633 00
Cash, Balance due from other Co's &c.....	15,470 82
Bills Receivable estimated good.....	54,000 00

Total.....\$112,488 30
Leaving the floating debt.....71,434 40

The amount of the Sinking Fund received and invested by the Commissioners, is \$48,281 85, and the Bonds of the Company purchased by them, with the acquisition thereon, amount to \$69,666 17.

The outstanding stock of the Company as registered is.....\$3,243,712 50
The outstanding Bonded Debt is.....3,811,635 00

From the Superintendent's Report we learn that 345,725 passengers, and 142,361 tons of freight were carried during the past year.

A resolution was introduced by John Gardner, Esq., authorizing the Directors to abandon that portion of the Northern Division lying between Sandusky and Clay Junction, whenever they deem it expedient so to do, and if necessary, to take legal steps to remove the western terminus of that Division to Sandusky, Clyde or Fremont. The resolution was adopted—Ayes 15,720 shares, nays 462 shares.

A LETTER FROM DR. J. FOWLKES.

MARSHALL, TEXAS, June 2, 1858.

R. W. Loughery, Esq.

Finding much misapprehension existing feigned or real, in relation to the Southern Pacific Railroad Company, and especially to myself, most industriously circulated here, I deem it proper to give the public some facts, without indulging in comments at present.

On the 23d of December, 1857, I made a contract with this Company to pay its creditors in Texas the sum of \$50,000 by the 1st of April, 1858—to pay Messrs. J. T. Grant & Co. what should be due, supposed about \$50,000, sixty days after the road should be completed to Marshall, and the remainder of the debts of the company at any period within twelve months, at my discretion, but not to exceed, however, the sum of \$350,000. Of this sum \$73,832 was payable at one, two and three years, which was to be provided for by me at maturity. It will be seen that \$50,000 to Texas creditors, \$50,000 to John T. Grant & Co., and \$73,832 at one, two and three years, and the further sum of \$176,168, constituted the whole amount of my payments for the Company, save and except the payment of \$12,600 monthly to Messrs. J. T. Grant & Co. for work west of Marshall, supplying, when needed, the iron for forty-five miles of road, thereby completing seventy miles of road for the Company, which payments of \$12,600 monthly I had provided for about the first of May.

The Company stipulated, on its part, that "no liens shall be created or REMAIN on the property of the Company, except to secure Messrs. J. T. Grant & Co. and the Texas cash balance of \$50,000 before mentioned, and the State loan, and to secure the construction bonds and interest thereon."

The Company agreed to surrender to me "all the installments or assessments on stock then due, or to become due on the 1st of January, 1858, to be applied, under my directions to these liabilities of the Company. The company agreed to furnish me \$100,000 of short credits, given me without the State loan, and also to deliver to me within ten days from the 23d day of December, 1857, \$400,000 of its construction bonds."

I have presented briefly the pons of our contract, showing my undertakings and the undertakings of the company.

The company have wholly failed to remove the liens from its property. It neglected, under my urgent promptings, to deliver me

the \$400,000 of bonds, for the period of some forty days, which was to have been done in ten days, for without the removal of liens, I should not have undertaken to provide means etc. to pay these debts or to construct the road, with such a Trust Deed, containing such extraordinary provisions.

After the completion of the contract, I called for \$30,000 of short credits, which were furnished me after unnecessary delay, and not until the determination to close the Trust Deed in Texas, which has resulted in the sale under it of the 1st inst.

Early in February, just about the period I received the \$400,000 of construction bonds, some of the creditors of the Company out of Texas, and whose debts I was assured would be deferred for twelve months, and which I had only agreed to provide for within twelve months, and not sooner, became restless and clamorous for payment. I was forced to look to them, as nobody else seemed disposed or able to do so, and as threats of closing the Trust were then making, which any single creditor, large or small, could demand of any one of three trustees, and a sale made at ten days' notice. The necessity to avoid a sale rendered it indispensable of me to be divested of my simple undertaking of providing \$50,000 for Texas debts by 1st of April, and the payment of \$50,000 to Messrs. Grant & Co. sixty days after the completion of the road to Marshall as per terms of my contract.

I was driven by the emergency to begin the work of general settlements, and I succeeded in arranging, I will not actually say paying; for in consequence of the failure of the company to remove all liens from its property, I made many contingent settlements, leaving the parties with all the protection given by this Trust Deed of 19th of October, 1857, until each and all the debts could be taken up and actually extinguished. This was but just to such creditors as I arranged with, and the best I could possibly do in this exigency. I arranged, after this manner, by actual payment and by these contingent settlements, the gross sum of \$314,000. This sum, with the \$73,832 due and only payable by me for the company at one, two and three years, will make the gross sum \$387,832, exceeding by \$37,832 the sum total of indebtedness which I assumed and undertook to provide for. I find the debts of the company to fall but little short of \$500,000, exceeding the sum which I agreed to arrange something like \$150,000.

But to my specific undertaking—the payments called for by the express terms of my contract have not been complied with by the company in a single important respect.

I have taken up of the Texas debts, to Messrs. W. T. Scott, Hall, Ward and others \$24,500; claims of Col. L. T. Wigfall, W. P. Hill and others, for some \$5,000 more; and the New Orleans office has received from installments, cash remittances from sales of stock by my agents and otherwise, so I learn, of some thirteen or fourteen thousand dollars; which above the trifling contracts, one for mere office expenses, should have been applied by that office to what was due; a small balance of Messrs. R. Mills & Co. only, and then to the debts of Texas.

It will be seen that I have specifically provided for about \$30,000 of Texas claims embraced in the \$50,000, assumed to be paid by me on the 1st of April, and from installments or assessments pledged to me under my contract of 23rd December, 1857, some \$25,000

in cash has gone into the possession of the company at New York and New Orleans. Strictly construed, I have furnished \$25,000 in cash from the sources pledged to me by the company—taken up about \$30,000 of the identical debts which I agreed to pay—exceeding, with cash and debts the sum stipulated to be provided by the first of April—\$5,000. Without caviling, for a moment, about the terms of my contract, or complaining openly of failure and neglect of the undertakings by the company, I was informed by letter on the 29th of March last, by Mr. George S. Yerger, President of the Company, upon his return to New Orleans from this place, that some \$35,000, within sixty days, was all that was then wanted for Texas. Of the same date he enclosed me the written assurance of Messrs. J. K. Yerger and Wm. Bradfield, that they would not advertise short of a notice of sixty days, under the Trust Deed.

I then suggested, first to Col. W. T. Scott, the propriety of deferring the election in May until June, in order to give me the necessary time to raise the \$35,000 referred to in Geo. S. Yerger's letter of the 29th of March. The suggestion met Col. Scott's cordial approval. It was then made to Mr. Yerger and the Directors, which resulted in the postponement of the election. With Mr. Yerger's letter and those of the Trustees, I left New Orleans for Memphis to provide for \$35,000. I succeeded in securing \$28,000 in thirty-five days, and wrote to New Orleans the fact, assuring them that arrangements existed beyond all reasonable doubt to cover \$40,000, which seemed, from a detailed statement rendered by Major E. A. Blanche, Chief Engineer, essential to cover the entire Texas debts. I wrote, urging Messrs. Wigfall, Hall, Scott, (then in New Orleans,) to come to Memphis in person, one or all, that they might realize the true state of my monetary arrangements, but they declined to comply with my requests.

I then despatched Hon. E. W. M. King, and Messrs. Delafield and Pryor who were cognizant with all the facts to New Orleans, as my presence in Memphis was then indispensable to the completion of pending pecuniary arrangements for the relief of the company. Messrs. Delafield and Pryor went accordingly to New Orleans upon this mission to confer freely, and fully empowered to arrest the disastrous movements in Texas. They signally failed. I then wrote and telegraphed the President and Directors at New Orleans, if they would arrange the debts due the Union Bank, H. Wickland, W. P. Anderson and George S. Yerger, making some \$46,000,* that I would, from my own resources, at whatever sacrifices, still protect the company from this movement. I received no promise of this assistance even, being telegraphed from New Orleans that nothing short of \$125,000 in cash would do any good; and finally, about the 19th of May, I received a telegraph from the Secretary, Mr. C. G. Lawrason, that all the debts in the Trust Deed must be paid, except Yerger's!

Upon investigation, in my endeavors to use the Trust Deed Sale, etc., as a security to thwart these Texas movements, I found that the Trust itself was void for reasons commending themselves most fully to my own judgment. I then repaired to the place to arrest the sale. The opinions expressed by the Bar and the Bench in Tennessee, I found

to be supported by the ablest legal talent in Texas. The property has been bought, by an association composed, as I learn of Texas creditors, Texas Directors, Engineers, Officers, and Agents of the Southern Pacific Railroad Company.

I am content, at present, to submit, without comment, this naked statement of facts, as essential to a correct judgment of my responsibilities and my duties, and a clear and full understanding of the acts and doings of myself and of the company, its officers, directors, agents, etc., in the premises.

I challenge the contradiction, from any respectable individual, of a single material fact here presented. Upon the facts, just as they are, without elongation or contraction, without coloring or mystifying, I rest my claims for the support of the intelligence and virtue of the country, and especially of the stockholders, etc., of this company. Let others do likewise. Give the people time and truth, and the masses always do right, think right, and decide right of men and things.

J. FOWLKES.

NEW ORLEANS, March 29, 1858

DR. J. FOWLKES:

Dear Sir.—I have just returned from Marshall. A subscription of over \$7,000 was raised there to finish the road to Marshall. The rails are there now, sufficient to lay five miles more. The road is graded, so that the five miles can be completed in less than sixty days. I have urged the work ahead. When this five miles is finished, the Company will have 256,000 acres of land. This has been, or a large part of it, has been surveyed, and Mr. Wickland, the surveyor, a man of integrity, believes it to be very valuable. I believe it will average over five dollars an acre. So soon as this five miles are finished, the first Bonds of the Company, numbered from 1 to 1000, for \$1,000 each, will, in my opinion, be as good as any security in the country. These bonds will be secured by the twenty five miles of road finished, subject only to a lien of the State of Texas, for \$6,000 a mile; but they are secured by this land, and by any afterwards obtained, as they are to be paid out of the first proceeds of sales of any lands the road may obtain from Texas, according to the resolution of the Board of Directors, endorsed on the bonds and making a part thereof.

I find the debts due in Texas, to be settled by you, are about \$70,000. Thirty-five thousand dollars, in sixty days, is all you want; for the balance, Scott, Ward, Hall, and others, will wait until 1st of March, on the terms proposed by you to them.

As you have arranged with John T. Grant & Co. to go on and grade the 23 miles yet required to be graded, before we get the \$150,000 loan from Texas, this insures us that by 1st of March next, probably by 1st January, as Mr. Grant told me he could finish it by 1st January.

The last Legislature of Texas raised the price of her lands. All lands on any railroad reserved to the State, are now two dollars per acre.

Yours, truly,

GEORGE S. YERGER.

OFFICE SOUTHERN PACIFIC R. R. Co.,
New Orleans, March 29, 1858.

DR. J. FOWLKES:

Dear Sir.—I herewith hand you letter from Trustees John K. Yerger and Wm. Bradfield, to the President of the Company.

Very respectfully,

Your obedient servant,

Geo. C. Lawrason, Sec'y.

NEW ORLEANS, March 29, 1858.

Geo. S. YERGER, President S. P. R. R. Co.:

Sir.—The undersigned, trustees in the Deed of Trust made by the Southern Pacific Railroad Company, on the 19th of October last, have understood that arrangements of a satisfactory character are being made, by which the debt in said Deed of Trust will be arranged. Should, however, any creditor mentioned therein demand a sale before the arrangements are completed, the undersigned will notify you of the fact immediately.

By the terms of the Deed of Trust, they can not advertise less than ten days, but from legal advice obtained by them, they have advised that in their discretion they may advertise in such reasonable time as will give notice to all; and should an advertisement be necessary, (which, however, they believe will not be,) they will advertise not less than sixty days, of which you shall be notified.

Respectfully,

Your obedient servants,

JOHN K. YERGER,
WM. BRADFIELD.

THE SOUTHERN PACIFIC R. R.

We devote considerable space to-day to interesting correspondence of parties connected with the above road. From the magnitude of the swindle, and the boldness with which it is carried out, we deem every thing calculated to give any light in reference to it, as being of sufficient interest to be worthy of being read. Although we have previously published an account of the sale, we append the following from the *Texas Republican*, published at Marshall, which will aid in giving a further insight into this nefarious transaction:

Tuesday last was a day of excitement in Marshall. A considerable number of people from the country, attracted by curiosity, were in attendance. Messrs. Fowlkes and Post had the day previous sued out an injunction to restrain the Trustees from selling the road, but had failed, as was generally understood, in their object; consequently the sale was inevitable.

The scene at the Courthouse was rich and rare, and, to an outsider, somewhat amusing. Mr. Joseph M. Taylor (commonly known in this community by the sobriquet of "Uncle Joe,") did the selling. After stating the property to be sold, he announced that it was a cash sale; the purchaser would be allowed thirty minutes to comply with the terms, and if he failed in that time, it would be sold over again at his risk. When this was accomplished, Mr. Murrah, in behalf of sundry clients who held judgments or claims for damages against the road, gave the necessary notice, and in behalf of Mr. Post and others forbid the sale, first, because those parties asserted a prior claim or mortgage, and secondly, in behalf of these parties, and other stockholders, declaring the sale illegal and void, and the deed of trust a nullity. Then followed Mr. C. M. Adams, in a similar manner, who gave his reasons why the deed of trust was a nullity. Then came G. McKay, Esq., who had sundry notices of warning. Of course some confusion and altercation occurred.

The sale finally came off, but without animation in the bidding. The property was finally knocked off to Dr. Jefferson M. Saunders for the sum of \$40,000.

We understand that Dr. Saunders executed a deed to the following parties: Messrs. John T. Grant & Co., W. T. Scott, J. Pinckney Henderson, J. Taylor, J. E. & J. S. Brown, M. J. Hall, W. R. D. Ward, E. A. Blanche, L. T. Wigfall, W. P. Hill, George C. Lawrason, J. M. Taylor, B. Smalley, S. H. & A. M. Burnham, J. F. Smith, Thomas F. Swanson, H. Wickland, H. P. Perry, H. M. Hood, creditors, etc., of the company.

The new company has been organized and elected the following directory: Messrs. J. P. Henderson, L. T. Wigfall, George B. Adkins, W. T. Scott, John T. Grant, Benjamin Long, and J. M. Saunders.

In the mean time, Messrs. Fowlkes and Post, in behalf of themselves and other stockholders, succeeded in getting an injunction, restraining the new organization from exercising the franchise, controlling the railroad property, or exercising any of the privileges of the act of incorporation, until after the 19th of June. This injunction lasts sixty days; until the 19th of June without bond,

* I could not decipher these figures.—Printer.

and after that time requiring a bond of \$500,000.

According to public notice, published in the New Orleans papers, a meeting of the stockholders was called to meet in that city on the 2d of June. It is to be presumed that they did so meet, (the *Flag* to the contrary notwithstanding,) and have or will elect a President, Board of Directors, and other officers, and move the office to Texas, in compliance with the act of the last Legislature, as otherwise they would forfeit, at least eight of the sixteen sections of land, the State loan, and perhaps the charter itself. Whatever may be said about fraudulent stock and bogus stockholders, it is not to be presumed that the thousands of *bona fide*, cash paying stockholders, scattered over the country, will submit to be cut off in this summary manner, without a struggle.

We may then confidently expect to have two organized companies in the State asserting a claim to the franchises and property of this incorporation. Which will prevail, is a matter to be determined by the courts of the country.

DRIVING THE FIRST SPIKE.

Although the contractors have been for some time engaged in laying down ties and getting ready the iron, and doing all that could be done in the way of track-laying, before the arrival of the spikes and chairs, Thursday last may be said to have been the beginning of track-laying.

At 5 o'clock p. m., Thursday, our citizens assembled to witness and participate in the ceremony of laying the first rail, and driving the first spike on the Pensacola end of the Montgomery and Pensacola Railroad.

As one of our oldest, most substantial and respected citizens, and in view also of his deep interest in the success of the great work, Dr. John Brosnahan, was called on to give the initiative stroke. It was a stalwart blow, and given with a will.

Mr. Joseph Sierra, Collector of the Port, was next called on to hit the spike. He said that as Mayor of the City of Pensacola, he had the privilege of being the first subscriber to the stock of this road—he had labored hard and continuously for the furtherance of its interests, and it was with peculiar satisfaction that he had witnessed its progress and triumph over all and every obstacle. The pleasure of participating in the ceremony of driving this, the first spike, could only be equalled by that which he would experience in driving the last—an event which is fast and surely hastening on. So far as human foresight could predict, the end we have so long looked for was not obscured by a single shadow of doubt. There was in the vocabulary of our railroad affairs, no such word as fail—the distinguished President and Board of Direction had long since erased the term.

The members of the Board of Direction and Board of Aldermen next came forward, followed by Mr. Broughton, one of the contractors, after which our citizens generally contributed their quota of elbow grease to help home the spike which marks the embryo development of a queenly city—a new era in the growth and prospects of Pensacola, and of West Florida—the starting point in a great race for the commercial supremacy of the Gulf—a spot from whence the most extravagant visionary may date the realizations of his wildest dreams of the greatness and grandeur of our destiny.

The *Observer*, we must not forget to mention, gave that spike one of its best "licks"—a process which it intends to continue until there is no more spikes to drive. To tell the truth, the *Observer* considers itself a first class locomotive on the railroad question, and will give in to no one in zeal for the cause—not even to a semi-weekly machine.—*Pensacola Observer*, June 12.

MISSISSIPPI AND MISSOURI RAILROAD.

We notice in the *New York Herald*, a call for a meeting of the Directors of this road, which was to be held in Chicago on the 11th inst., at which time we suppose the Company will decide whether they will commence the work at this end of the route. Our citizens stand ready to assist them, in case they will commence work here, and we think it is their duty to do so, in as much as there is no probability of their being able to complete the road to the east line of the county by the time stipulated at the time the people voted to loan the credit of the county to the amount of \$300,000 to aid in its construction. We also think that the road would be a paying road, so soon as completed sixty miles east from this place. Within that distance upon the line of the road, are extensive beds of coal, the transportation of which would form a considerable item in the freight line. Wood is worth \$4 per cord; and while it bears that price, 25 cts. per bushel would be a reasonable price for coal. Coal can be placed in the cars at from 5 to 8 cts. per bushel, leaving at the least calculation, a clear profit of 15 cts. per bushel on every bushel of coal brought into this City. Then we are in want of building stone. On the Nishnabotana, is as fine quarries of stone as can be found in the West. The distance from this City is 25 miles; and stone is worth from \$3 to 4 per perch, while they can be furnished at the quarry at from 50 to 60 cents and the railroad could enjoy the monopoly of the carrying business in these two articles, which alone would yield a revenue of at least \$50,000 per annum to the road. When we take these things into consideration, we must reiterate that 60 miles of the M. & M. road, completed east from Council Bluffs, will be a paying road.

We hope, and have reason to believe that the company will commence the work at this end of the route this season, and we know, if they consult their own interests they will do so. We hope to be able in our next issue to lay before our readers, the determination of the Company on this point.—*Bugle*.

COUNCIL BLUFFS & ST. JOSEPH RAILROAD.

The survey of this road is progressing finely, and we understand that the engineer reports the route as much better than he at first anticipated. The President of the Road was here one day last week, and reports the citizens along the line as wide awake to their own interests, and says that he has no doubt but every county along the line will subscribe liberally to the stock of the Company. If they do so, and we have no reason to doubt that they will, the road will be pushed ahead a little faster than any other road in the West. The counties of Pottawatomie, Mills and Fremont, can build the road within their own limits. They have a large amount of Swamp Lands which they can and will appropriate in aid of its construction. The grading and bridging can be done this season,

and the road once graded and bridged, there will be no difficulty in procuring the rails.

While in St. Louis, we conversed with several wealthy citizens of that place, relative to the road, and all agreed that it is a road in which St. Louis is deeply interested, and would aid in its construction. The counties in Nebraska and Kansas, lying upon the Missouri river, are also deeply interested in the construction of this road, and we doubt not, from the interest already taken in the matter, will materially aid in its construction. Let the ball be kept in motion; every revolution it makes adds to its size and importance.—*Bugle*.

THE LOGIC OF DOLLARS.

The total amount of land granted to the Illinois Central Railroad Co., was 2,595,000 acres. The Company has built 704 miles of railroad, now in operation, at a cost of \$25,940,244. It has sold 865,211 acres of its lands for \$10,713,228, and has still on hand 1,729,789 acres, which, by the average value of its sales last year, are worth \$29,386,746. Here is the logic of dollars which every body can understand.

Our Pacific Railroad through Texas will be 783 miles long, and has a grant of 8,017,000 acres and a loan of \$6,000 per mile from the State. You will search in vain the records of railroad legislation and railroad companies on this continent for any parallel to this. Placed by the side of the Southern Pacific Railroad, the prospects of any other railroad company that can be named in this country sink into insignificance, because absolutely contemptible. Taking the average price of the Illinois Company's lands as a basis, the lands of the Southern Pacific Road will be worth more than \$120,000,000! Any body can make the calculation for himself.

That the lands will be worth more than the Illinois lands, we have not the least doubt. They are among the richest lands in the world, in a delightful climate, and capable of producing any thing from cotton and figs to potatoes and oats. With the market they will have at this city, within a day's ride on the road, can any man set bounds on their value? The fact is, the more we consider this road the greater does our astonishment become at the vastness of its prospective wealth, without counting what the road itself, when completed, will earn at all. The boon offered by Texas was not generally known or duly considered, otherwise there would have been half a dozen companies in the field contending for it. If managed with energy and wisdom, as we can not now doubt it will be, the company will be one of the richest in the world.

Eight million acres of land is easily pronounced or written; but does the reader comprehend the quantity represented? It is greater than the combined area of Rhode Island, Delaware and Connecticut! It is nearly twice as great as Massachusetts and New Jersey together, greater than New Hampshire or Vermont! The latter, the largest but one of the New England States, contains but 6,535,680 acres. It is not strange that the stock of this Company is taken by thousands of shares at a clip, as we learn is the case.

We clip the above out of an old New Orleans *Bulletin* for the purpose of recounting before the eyes of some of the stockholders in the Southern Pacific in the west, the value

of the property of which they have so recently been defrauded by those in whose hand they had so generously placed this rich inheritance.

WASHINGTON CORRESPONDENCE.

[Special correspondence of the Daily Pennsylvanian.]
WASHINGTON, June 17, 1858.

One of the last acts of the Senate, before the adjournment, was to report the bill for the erection of the Territory of Arizona, and make it the special order for the first Monday of the next session. There can be no doubt but that the Territory will then be established without any unnecessary delay; and for this the people of Arizona are indebted to the untiring energy and industry of Mr. Sylvester Mowry, their delegate, who has represented their interests here this winter. That gentleman has exerted all his power to secure a Territorial Government for his constituents, and it may safely be said that, if more than half the session had not been consumed by Kansas agitation, he would have succeeded long ago. Under the circumstances, he did all he could, and far more than many others could have accomplished. His familiarity with the resources, the geographical position, the wants and wishes of the people of Arizona, added to his general intelligence and uniform courtesy, was of immense benefit to the cause he had in charge. It was only through his personal influence that the bill was reported at all this session, and his constituents may understand the extent of their obligations to him when it is known that the pressure was so great that even Oregon could not be admitted as a State, notwithstanding all her influence, nor could Decotah be established as a Territory, in view of its pressing demands.

Special Dispatch to the N. York Times.

WASHINGTON, Wednesday, June 23.

Lieut. Mowry has been designated by the Secretary of the Interior as Acting Superintendent of Indian Affairs for Arizona, with important instructions for regulating and pacifying the Indian tribes. He will also be charged, it is presumed, with the duty of selecting sites for the military posts to be established throughout the Territory.

Lieut. Mowry will return from Arizona before the opening of the next session, to urge the passage of the Arizona bill, which is made the special order for an early day of the session.

EDGEFIELD AND KENTUCKY RAILROAD.—At the Annual Meeting of the Stockholders of the Edgefield and Kentucky Railroad Company, held on 31st ult., E. S. Cheatham, John Shelby A. Ewing, E. P. Connell, N. Hobson, E. A. Fort, and Dr. T. Meneses were unanimously re-elected Directors for the ensuing year, and at a meeting of the Board yesterday, E. S. Cheatham was unanimously re-elected President, W. B. A. Ramsey, Secretary and Treasurer, and A. Anderson, Civil Engineer.

We are glad to see that the services of this able Board of Directors has been secured for another term to that important enterprise, and that there is to be no change in the official management. The compliment of a re-election was never more fitly bestowed than upon the able President of the road, Col. Cheatham, whose peculiar fitness for so difficult and important a position is universally acknowledged. In spite of the recent financial panic, the business of this road has progressed steadily, the estimates have all been promptly met, and no obstacle, however formidable, has been strong enough to oppose the energy and determination of its President and his coadjutors. The Secretary and Treasurer, Col. W. B. A. Ramsey, and the accomplished and laborious Chief Engineer,

Mr. Anderson, are officers well fitted in every respect for their positions.

From the reports of the officers submitted to the stockholders, we are gratified to learn that the iron for the first thirty miles has all been purchased, and will be in the course of arrival during the present month, and the laying of track will commence during the month of May, and will probably be completed to Springfield during the fall. The entire line of road to the State line will be completed during the summer of 1859.—*Nashville Banner.*

THE LAKE TRADE OF 1858.

Ask almost any Buffalo business man about the trade of this season, and he will shake his head and answer "nothing doing." Perhaps he will also express an opinion that the town is about ready to fence in. That our readers may understand upon how sound a basis these complaints rest, we have taken the pains to compile the following comparative statement of the Lake commerce in some leading articles, up to noon of June 23d, for the years 1857 and 1858. We have been obliged to omit the trade in provisions, and can only state in general terms that that department is always light at this season, but that the imports are slightly in increase of last year thus far. Our statement embraces the receipts of the articles named at this port up to noon, June 23d, in each year:

	1857.	1858.	Increase.
Flour, bbls.....	122,875	455,289	332,414
Wheat, bu.....	1,676,494	3,175,662	2,499,168
Corn, bu.....	959,977	970,218	10,241
Oats, bu.....	351,350	944,194	587,844
Barley, bu.....	452	74,948	73,996
Rye, bu.....	7,805	26,818	19,013
Lumber.....	14,027,937	11,040,002	2,987,935 dec
Staves.....	6,215,386	4,417,469	1,797,917 "
Hogs.....	16,268	49,165	32,898
Sheep.....	5,618	8,219	2,601
Cattle.....	4,514	10,407	5,893
Wool, bales.....	583	822	239

This statement is much more favorable than our business men had any reason to anticipate in view of the low prices of produce and the consequent indisposition of holders to sell. We have been told again and again that there was but a limited amount of produce, but here, long before harvest, our port has done nearly a half season's business in the great staples, wheat and flour, and shows a marked and gratifying increase in every article except lumber and staves. The range of prices have been such that dealers have had a fair margin for profit, and though no astounding fortunes have been made, it is fair to assume that the grain traffic has thus far been remunerating. The proportion of sales to receipts at this point has been larger than usual, a large modicum changing owners on Buffalo docks.—*Com. Advertiser.*

CANAL TOLLS FOR 1858.—The following is a statement of tolls received on the New York Canals, during the first week in June; and also the total amount received since the opening of navigation up to June 8th, in the years specified below:

	1st week in June.	Total to June 8.
1847.....	\$157,224	\$565,513
1848.....	101,819	723,052
1849.....	88,786	703,696
1850.....	63,009	661,416
1851.....	90,043	823,373
1852.....	102,892	648,092
1853.....	81,010	674,571
1854.....	105,595	608,757
1855.....	96,850	495,015
1856.....	79,083	321,274
1857.....	56,742	274,085
1858.....	81,703	426,088
Decrease from 1847.....		\$440,420
Increase over 1857.....		152,008

FINANCES OF MEMPHIS.

The post-bond indebtedness of the City of Memphis, amounts to the sum of \$1,536,000, payable as follows:

In New York City.....	\$1,294,900
In Philadelphia.....	242,600
	\$1,536,000
Bonds issued to M. & L. R. R. Co., secured by deed of trust on Navy Yard grounds...	300,000

Total bonded indebtedness.....\$1,836,000

The Navy Yard Bonds bear interest at the rate of 7 per cent. per annum, and the Company has disposed of \$70,000 worth of the bonds, the interest on which is due and payable in this city on the 1st of July, and amount to \$2,450. The six per cent. bonds of the city amounts to the sum of \$1,536,000, the interest on which is due and payable in New York and Philadelphia semi-annually, viz: On the first days of January and July in each year. The semi-annual interest on these bonds, due on the first proximo, amounts to \$46,080. The total amount of interest to be provided for on the 1st July next is as follows:

On post bonds payable in New York and Philadelphia.....	\$46,080
On Navy Yard Bonds payable in this city.....	2,450

Total interest.....\$48,530

The interest has always heretofore been promptly met, without embarrassment, and measures have been taken by the Finance Committee of the present Council, to meet the July interest.—*Am. Railroad Journal.*

APPROPRIATIONS FOR THE YEAR.—The Union publishes the following table of the appropriations made by Congress at the late session for the service of the year 1859:

Regular appropriations for the service of the year 1859.

Pension.....	\$ 769,506
Indian, regular.....	1,334,104
Do supplemental.....	959,957
Do deficiency.....	339,595
Consular and diplomatic.....	912,400
Military Academy.....	182,604
Naval.....	14,508,254
Sundry Civil.....	5,557,148
Legislative, executive, and judicial.....	6,134,093
Army.....	17,145,806
Mail Steamer.....	960,750
Post Office.....	3,500,000
Collecting revenue from imports permanent, additional.....	1,150,000
	\$33,458,253

To which add—	
Treasury notes.....1858.....	\$ 20,000
Manufacture of arms.....1858.....	360,000
Expenses investigating committees.....1858.....	35,000
Treaty with Denmark.....1858.....	408,731
Deficiency in printing, &c.....1858.....	741,169
Do. for the year.....1858.....	9,704,200
Deaf, dumb, and blind, Dis. Columbia.....1858.....	3,000
Expenses investigating committees.....1858.....	12,000
Clerks in Oregon to Register and Receiver.....1858.....	7,000
Running Texas Boundary Line.....1859.....	80,000
Incident to the loan of \$20,000,000.....	5,000
	10,976,130
	\$64,434,365

Estimate—
Other appropriations, bills not printed and indefinite, including all private bills..... 3,565,635

Total.....\$68,000,000

AN ACT relating to the crime of placing obstructions on Railroad tracks or removing any rail therefrom or committing any injuries to railroads.

SECTION 1. Be it enacted by the General Assembly of the State of Iowa, If any person or persons shall wilfully and maliciously place any obstruction on the track of any railroad in this State, or remove any rail therefrom, or in any other way injure such railroad, or do any other thing thereto, whereby the life of any other person is or may be endangered, he or they shall be punished by confinement in the State Penitentiary for life, or for any term not less than two years.

Approved March 22, 1858

CULTURE OF THE VINE IN THE S. W. ALLEGHIANES.—No. 2.—(Continued.)

BY DAVID CHRISTY.

Remarks.—Probable Exemption of the Grape from Mildew and Rot in the S. W. Alleghenies—Adaptation of their Soils to the Production of the Best Flavored Wines—The Extent of Territory adapted to Grape Culture which they will afford—Mr. Guerin's Letter.

Another cause of injury to the vine is believed to exist in excessive collections of water around its roots. This evil prevails in limestone soils, and in those also where clays predominate, and the underlying strata are horizontal. Some vintners speak of it as "drowning" and "scalding" the roots. Nor can the evil be permanently overcome, even by deep trenching, as the filtering of the surface water ultimately carries down the finer particles of clay or lime, and forms a flooring, impervious to water, which retains it around the rootlets of the vine. But from the geological structure of the Southern Highlands—the highly indurated or crystalline character of its rocks, and the chemical nature of the soils which they yield—neither excess of fertility or moisture can ever prevail to any injurious extent. The strata are upturned upon their edges, at various angles, and remain undecomposed to any great depth, thus affording opportunities for the water to filter downward far beyond the point to which the roots of the vine can ever penetrate. The soils are derived from gneissoid, schistose, and slaty rocks, of the *Metamorphic* period, with less than a half dozen of narrow bands of limestone in a distance of over two hundred miles. The soils are, therefore, composed mainly of silicates of alumina with a moderate per centage of lime, or of soda, or magnesia, the proportions being about the same as in the primary rocks. No excessive fertility, therefore, can exist in these soils, except by over-manuring, and no morbid growth of the grape can occur, if the soils are left in their native condition.

It may be feared from what has been said, that the soils of these mountains are too deficient in fertility to allow of the permanent growth of the grape. But no alarm need exist upon this point. The soils, generally, are intermingled with small fragments and particles of rock, giving them a loose, porous texture. The vegetable matter, annually contributed to the surface by the plants, grasses, and trees, has been carried downward, during decomposition, into the subsoils. This, in places, leaves the surface soil with less fertility than exists in the subsoil; as is indicated even in the poorest spots, by the vigorous growth of that class of young trees which send their roots deeply into the earth.

Mr. Guerin, at Vinona, has portions of his vineyard planted upon the poorest of the clay slate lands, and yet the vines have as healthy and vigorous a growth as is exhibited by the young oaks and hickories which stand upon the outside of his enclosures. Remarks upon the productiveness of the mountain soils in general are left for another place.

In closing the investigations upon this division of our subject, it is not claiming too much, it is thought, to say, that the Southern Highlands combine all the elements of successful grape culture. By consulting the article upon "Fog and Rain in the Mountains," it will be seen that their altitude must be very favorable, and that such will be the freedom of circulation afforded to the air

among the vines planted on their declivities; and such their exposure in rising terraces to the warm influence of the sun; that mildew and rot will be incapable of gaining a foothold among the vineyards, while the grape itself must reach a maturity and perfection of development that will produce the best of wines.

The results at Vinona, together with the facts stated, are very satisfactory upon this point, and may be considered as settling the question, that the grape crop, in the Southern Highlands, will be exempt from mildew and rot.

There are other questions besides these, demanding attention. The fine flavor, or *boquet*, of the best European wines has not yet been attained for those of the United States. Till this is effected, our native wines can not compete with the foreign. To overcome this difficulty, we must first ascertain its cause. As compared with each other, there is as great a diversity in the flavors of foreign wines, as there is between them and our native wines. Now, if causes exist in Europe which necessarily produce the best wines, from year to year, in one vineyard, while an inferior wine is invariably yielded by another, then why may not the same results be reached in the United States?

Inquiries have been made into the probable causes of these peculiar results, in European wine making, and facts such as these have been ascertained. American travelers, who have visited Europe, as well as foreigners who have been familiar with the facts, state, that there are some unexplained mysteries in that country, connected with the production of the choicest wines. The testimony is, that often two adjacent vineyards, and even different portions of the same vineyard, produce wines quite different in their flavor and commercial value. As these wines are all subjected to the same amount of rain and sunshine, some other cause than climate and season must beget such a result. What is that cause? Why should the same variety of grapes produce a wine so widely different, when growing at one side of a field, from that which it would if grown at the other side? Why should two branches cut from the same vine, when planted but a few rods apart, produce wines flavored so differently that the product of the one will be sought after in all markets, while the other will sell in none, or at very reduced prices?

It will be impracticable to answer these questions satisfactorily, in the present state of our knowledge upon this subject. A few suggestions, however, may lead to investigations in the right direction. As the difference in the qualities of the wines referred to, is not produced by climate and season, it must, very probably, be caused by the chemical difference in the quality of the soils. And as each class of rocks is composed of chemical elements peculiar to itself, it is of the first importance to ascertain what kind of rocks have supplied the soils to the vines which yield the choicest wines. Upon this point considerable inquiry has been made, and the answer has invariably been, that such vines are planted upon *Slate Rock*. But whether it is *Talcose Slate*, *Chlorite Slate*, *Mica Slate*, *Argillaceous Slate*, or *Calcareous Slate*, none of the gentlemen consulted have been able to determine. And yet it may be very important to know this fact: because, if it be either of the two first named, then the *alkali* in the soil will be *magnesia*; if the third, it

will be *potash*; if the fourth, it will be *soda*; and if the fifth, it will be *lime*.*

But we are not altogether destitute of testimony, tending to support us in the opinion that the quality of the soil, in which the vine is planted, exerts a direct influence upon the flavor of the wine which it yields. We find the following statement in the *Voyages of Savarinus*, to the Cape of Good Hope, in 1774; that country being then under the rule of the Dutch. In speaking of the quality of the wine produced at the Cape, he says: "I have observed that we never drank any wine of one and the same flavor, at two different places; every soil that produces wine, gives a distinct taste to it."† In California, the principal field for grape culture is in the valley around Los Angeles, where the soil is siliceous in its character. But the quality of the grapes and wine at this place, are not equal to that on several of the distant ranchos, and at the mission of San Gabriel on the higher grounds. The vineyards on moist land produce larger and more juicy grapes, but they are not equal in flavor to those grown on dry soils. At some of the vineyards it is not possible to make good red wine, the skin of the berry being deficient in coloring matter. This deficiency is attributed to the influence of niter in the soil, as it is often seen to effloresce on the surface where a pool of water has dried up.‡

It would appear, then, that the main question demanding investigation, is the extent to which the flavor of wines is affected by the soils in which the vine is planted. This can only be done in Europe, and her Geologists will not care to labor for the benefit of a foreign country, in which too they might find a dangerous rival. The task must be performed by an American Geologist. The importance of such a reconnaissance will be understood when it is stated, that the mountain regions of Southern Virginia, North Carolina, South Carolina and Georgia, have extensive ranges of all the varieties of *Slate Rock* mentioned. It is true that such an investigation of the European vineyards might be dispensed with, and experiments instituted that would test the question at home. But to ascertain which of the slate rock formations it is that contains the magic elements, necessary to the production of the choicest wines, will require ten or twenty years of experimenting by American wine growers. Will they risk the trouble and expense of the varied experiments demanded to ascertain the truth on this subject? It is believed that they will not, because capital is in too much demand, in the ordinary business transactions of the country, to allow its being employed in experiments involving so much risk. And why should such delay be made, when a single year or two, by the aid of Government, might supply ample data to guide the vine grower to a correct solution of the question!

There is certainly sufficient encouragement to warrant the adoption of the course suggested. The experiments already made in grape culture in Tennessee, North Carolina, South Carolina and Georgia, within the last

* The analysis of these slates is given in the books, in per cents. of one hundred parts of each, thus: *Argillaceous Slate*—silica 56.11, alumina 17.31, soda 12.4, lime 2.16, magnesia 0.20, peroxyd of iron 6.96, water 4.58. *Chlorite Slate*—silica 31.54, alumina 5.44, magnesia 41.54, peroxyd of iron 10.18, water 9.32. *Talcose Slate* not given—silica 62.80, alumina 0.60, magnesia 31.92, peroxyd of iron 1.10, water 1.92. *Mica*—common—silica 46.10, alumina 31.60, potash 8.39, peroxyd of iron 8.65, oxyd of magnesia 1.40, fluoric acid 1.12, water 1.00.

† Page 58, Vol. II.

‡ Report of Railroad Exploring Expedition, 1857.

few years, have been attended with eminent success, so far as abundant vintages are concerned. But no finely-flavored wines, capable of competing with the best wines of Europe, have yet been produced in these States; and yet, with a single exception, they have all the varieties of soils known as existing in the vine districts of Europe. That exception is the volcanic rocks, which possess advantages, perhaps, in the excess of sulphur they contain. And, even in this respect, the South-western Alleghanies may possess the equivalent of the volcanic rocks of Europe; as they have been subjected to violent *Plutonic* action, in the progress of which the rocky strata have been upturned upon their edges, and some of their ranges of considerable width abound in sulphuret of iron. Whether this sulphur has permeated the strata from volcanic sources, or was originally deposited during the formation of the strata in the ancient sea-bed, the effects upon the soils are the same. They must abound in sulphur.

Another question arises here. Has the section of country under consideration, a sufficient extent of territory, adapted to the cultivation of the grape, to justify a vigorous effort to bring it under vine culture? Compare it, say, with France! It embraces a breadth of more than two hundred miles north and south, and more than two hundred from north-east to south-west. This area equals 12,000,000 of acres of land. "The number of acres under vine culture in France exceeds 5,000,000, giving employment to 2,000,000 of persons, mostly females, and in its transportation and sale, to 250,000 more."* Allowing one-half of the territory of the South-western Alleghanies to be available for vine cultivation, and it will give us a larger field of enterprise than exists in France, where, in a single year, there were produced 925,000,000 gallons of wine, or nearly one barrel for each inhabitant of the country. Now, suppose that even one-fourth of these mountain lands should be found adopted to the production of the grape, it will be amply sufficient to give employment to more than a million of population; and, at the present price of wine, to increase the productive wealth of the country to an almost incredible sum.

Upon the subject of the adaptation of the South-western Alleghanies to the production of fruits in general, it is only necessary to say, that, so far as attempted, it has been eminently successful.

* New Orleans Price Current, 1857.
† 1849.

STONE COAL DISCOVERED NEAR COUNCIL BLUFFS.—Mr. Carey has shown us some very fine specimens of Stone Coal, which he has recently discovered near this City. We have tested the article, and find it to be excellent—it burns free and well, with a clear bright flame.

Mr. C. has opened a vein near two feet in depth, and we are informed that Coal really abounds in very considerable quantities. It is supposed by those who are posted, that as the vein extends into the bluff, a thicker and better article of coal will be found. We have always strongly suspected that coal existed in large beds or strata, in the bluffs, near this city, are now happy to state, that those suspicions have proved correct. The fact is, coal has been discovered at Council Bluffs.—*City Bugle Notes.*

MONETARY AND COMMERCIAL.

The "heated term" as the lawyers say, is now here, the thermometer ranging from 99 to 100, producing the consequent general stagnation of all business. The eyes of every one is now turned to the crops, and on them hang all the hopes and fears of business men and traders.

We are of the number who have ever believed and said that the crops this year will be, to say the least, good; relative to this matter, the *Cincinnati Price Current* says:

We have received within the past week, reliable crop advices from between one and two hundred districts, chiefly in Ohio, Indiana and Kentucky, but including many points in Missouri, Illinois, Virginia, Tennessee and other States. From this information, which we have examined and digested, the following conclusions are deducible.

1st. The Wheat crop, though seriously injured in some localities, by excessive rains, rust, weevil, smut, &c., may, as a whole, be set down as a good one—rather above than below an average, both as regards quantity and quality. This crop added to the large stocks of last year's yield will furnish supplies for the ensuing consumptive year, considerably in excess of any season for some years past.

2d. Oats have been seriously injured in Kentucky, Tennessee, and some other Southern States, but in the middle Western States, the yield promises to be very heavy. Taking the country through, the indications are, the crop will be a good one.

3d. Barley and Rye will make a full average yield.

4th. Hay is generally very good. Reports of a short crop are rare, while from almost every section we have advices of an abundant yield. This crop will be a large one.

5th. Potatoes promise well, and with favorable weather hereafter, the yield will be large. The quality of the crop now in market is very good.

6th. Fruit will be short. This remark applies to almost every variety. There will not, however, be a total failure of any description. This is the best that can be said for apples, pears, peaches and plums.

7th. Corn, though quite backward, is now doing well, and all that can be said about it is that the prospects are favorable for a fair, if not an average crop. Much land intended for this crop will not be planted, but this omission has been confined chiefly to the lowest bottoms. On sandy soil and rolling clay lands we think all the ground intended for Corn has been planted, and that on the whole a basis has been laid for a fair crop. Its condition, however, is a critical one. A dry summer, or early frosts, would prove fatal; but with favorable weather nothing is to be feared.

In money matters nothing different from the usual monotony has occurred. Money is abundant, and easily obtained by those who do not want it, while those who need it find it more difficult of access, their securities being very carefully scrutinized. Capitalists, as we have often said before, are the most cautious of men, and much capital is allowed to remain inactive, (adding this to the intense dullness of trade) on account of the almost insane caution on the part of lenders. Rates are the same as previously quoted. Indeed, no material change in either the price or plethoric condition of money can be expected for some time. Below we give a private letter from Prof. W. W. Mather, of Columbus, Ohio, the eminent geologist. The assays were made by Mr. Mather from specimens selected by him out of a show case in the office of the company.

COLUMBUS, JUNE 28TH, 1858.

W. WRIGHTSON, Esq., Secretary Sonora Exploring and Mining Company:

MY DEAR SIR:—Since I wrote last I have been analyzing the ores you put in my hands a year and a half ago from the Heintzelman mine. It is a black vitreous sulphuret of copper and silver. Three specimens gave 17 per cent., 20 per cent., and 25 per cent., or an average of 20.62 100 per cent. of pure silver from the clean dressed ore. This is at the rate 412.4-10 pounds per ton of 2000 pounds of clean dressed vitreous ore. As there are 7000 grains in the avoirdupois pound, and 3-4 grains of pure silver in the present coinage dollar, 412.4lb×7000 grains=\$7,517.70-100 the amount of value

384 gr. in a ton of clean dressed ore like the specimens analyzed, besides the copper in the ore, and the undetermined quantity of gold, which together would make nearly \$8,000, if not more in value per ton of such ore as this specimen.

The argentiferous galenas also sent me yield silver, but not more than many of our galenas of the United States. If they are not too remote from the silver ores, they will be important in the smelting and cupelling operations to extract the silver.

Yours Truly,

W. W. MATHER.

This yield is undoubtedly a very large one, although not quite equal to that obtained by Prof. S. Garnett, of United States Mint at San Francisco; they were, no doubt, both above the average yield of the ores, which

is said to be about \$2,000 per ton. Mr. Cummings, a young gentleman recently from the mines, and not in any way connected with them, informed us that the manager, Col. Poston, had a large quantity already extracted of the richer quality, which he was shipping to Hermacillo & Guymas, as well as to San Francisco.

"In American Securities," says E. F. Satterthwaite, of London, in his Circular of June 4, "but little doing, though the reduction in quotations has brought out some buyers of Erie Third Mortgage and Michigan Central Bonds, 1869; there has been but little inquiry for New York Central Shares and Bonds since the terrible accident caused by the breaking down of a bridge; the 6 per cent. Bonds are offering at 80 to 81.

"Mr. Fisher's Report on the Illinois Central has given satisfaction from its lucid and clear statement of the position of the undertaking; the market, however, does not exhibit any manifestation of increased confidence, the Shares being flat at 15 discount. Free Lands offering at 78 without finding buyers, and Construction Bonds dull without demand."

SALES AT THE NEW YORK STOCK BOARD.—JUNE 28.

\$5,000 Louisiana State 6's.....	96
500 Cal. 7's.....	86
14,000 Miss. 6's.....	87½
5,000 North Carolina State 6's.....	93½
2,000 Terre Haute and Alto 2d mori. Bonds....	43
25,000 La C. & Mil. L. G. B.....	74½
5,000 Tenn. State 6's, '90.....	93½
3,000 Virginia 6's.....	95½
5,000 Illinois Central R. R. Bonds.....	85
50 Shares New York Central.....	82½
10 " Pacific Mail St. Co.....	75
10 " Erie R. R.....	17
50 " Hud. River R. R.....	26½
25 " Harlem R. R.....	10
40 " Reading.....	44
500 " Milwaukee & Miss.....	90½
5 " Mich. Cent.....	53
677 " Mich. S. & N. Ind.....	21½
100 " Mich. S. & N. Ind. pref.....	42
250 " Galena & Chicago.....	65
434 " Cleveland & Toledo.....	32
200 " Chicago & Rock Island.....	72½

NORTH PENNSYLVANIA RAILROAD COMPANY.—The earnings on the North Pennsylvania Railroad, for the last six months, foot up as follows, in comparison with the half yearly statement in 1857:

Earnings May, 1858.....	\$23,617 37
" May, 1857.....	22,941 04
Increase.....	\$676 33

Earnings, half year, ending May 31st, 1858..	\$134,364 89
Corresponding half last year.....	86,315 56
Increase.....	\$48,049 33

Earnings, half year.....	\$134,364 89
Current expenses, half year.....	64,169 44

Net earnings, half year..... \$70,195 45

This half yearly statement includes the three winter months, and the three spring months, and a period of great depression of trade.

THE following is a statement of the earnings of the New York Central Railroad, for the month of May, 1858, compared with its earnings for the corresponding month of the previous year:

1858.....	\$537,965 64
1857.....	655,256 01
Decrease.....	\$97,290 97

THE amount received for tolls on all the Canals of the State of New York for the second week of June, 1858, was..... \$61,885

In 1857..... 70,567

Decrease..... \$8,685

Total tolls received from opening of navigation in 1858, to the 15th inst., was..... \$488,006

Total tolls received from opening of navigation in 1857..... 344,652

Increase over 1857..... \$143,354

THE earnings of the Chicago, Burlington and Quincy Railroad Company for May, were:

	1857.	1858.	Decrease.
Freight.....	\$100,103 27	\$37,961 14	\$12,144 18
Passenger.....	40,538 96	28,191 68	12,667 28
Mails & Miscella'..	1,866 19	1,483 33	407 86
Total.....	\$142,508 42	\$67,641 15	\$55,309 27

CHICAGO AND ROCK ISLAND R. R.—(Elected June 14th).—Henry Farnham, Chicago; F. H. Tows, New York; Thomas C. Durant, N. York; C. W. Durant, Albany; William Walcott, Utica; E. W. Dunham, David Dows, William H. Macy, I. N. Cobb, J. B. Jervis, New York; E. Cook, Davenport; N. B. Judd, J. F. Tracy, Chicago.

Mr. I. N. Cobb and William H. Macy are new members, one to fill a vacancy and the other vice Mr. Flagg, who was dropped from the ticket.

The receipts of the Illinois Central Railroad in June have been: First week \$24,925; second week \$34,612; third week \$3,433—Total \$101,962. The third week's earnings in June of the Michigan Southern Railroad were \$37,365, against \$41,479 last year, a falling off of \$4,114. The Milwaukee and Mississippi Railroad will earn about \$100,000 in June, and the Rock Island about the same.

The receipts of the Catawissa, Williamsport and Erie Railroad for May, 1858, were: \$27,007.70 Due connecting Roads. 4,396.56

Balance. \$22,611.14

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Felloe Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.
my8 No. 98 Pearl street, Cin'ti

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th, Corby, Gossin & Co.'s make, for sale very low by
TRABER & AUBERG,
7 Public Landing.

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JEWINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, {
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette, and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonsville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Panama, Peoria, Danville, Racine, Decatur, Bloomington, La Salle, and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURG.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnett House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.
W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
no13 10 Wal ar Broadway, New York.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

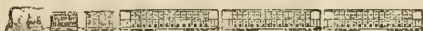
Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even ing.

Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup'l.
Racine, May 15, 1857.

H. S. DURAND, President.

my21

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by
THEODORE DEHON,

feb5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

fy23-1m

D. M. CARHART.

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

oc129-6m

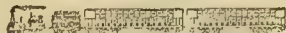
T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy. 27.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, pressing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co. feb-17

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

6 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From 1/4 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 209 South Third St.,

PHILADELPHIA. [sig]

STEPHEN MORRIS,
THOS. T. TASKER, JR.,CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

A. H. GOODMAN & CO.,
Feb. 7, '56-2m.] no. 7 Wall st., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,

ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, and from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

JOEL C. LANE

feb11r

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,600,000 feet Trestling B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging. 44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Pierce, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860. WM. B. MUMFORD, President. Clarksville, Tenn., May 1, 1859.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars, Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,
1 n24 NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

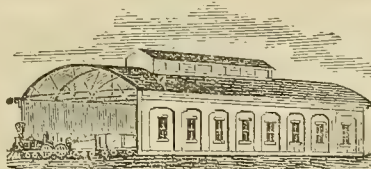
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$23 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 197 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16*

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission

all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND.

Consulting Engineer,

64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C. apr12

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



terns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—1y

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, tf.

VOSE, LIVINGSTON & CO.,

9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:30 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

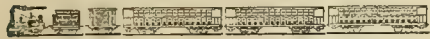
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Supt Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH 1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

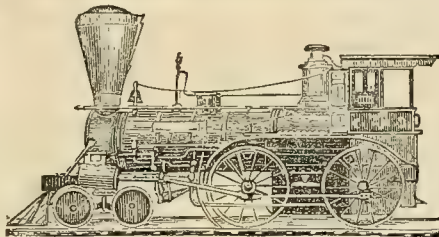
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent. my13

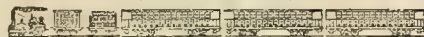
CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
ap.20 MOORE & RICHARDSON.

1858 1858.

CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO AND MISSISSIPPI (BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:31 P. M.
ACCOMMODATION TRAIN at 1:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:00 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

OFFICE OF PITTSBURG AND CONNELLSVILLE R. R. Co.
Pittsburg, May 18, 1858.

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connelville Railroad Company, in the city of Pittsburg, until the 15th of June next, inclusive, for the GRADUATION, MASONRY, BRIDGING, TRESTLING, STATION-BUILDING AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles along the Monongahela River, between Pittsburg and Port Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the First Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all, the coming autumn.

By order of the Board of Directors.
ma27:3w BENJ. H. LATROBE, Pres.

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Cincinnati, March 5, 1856.

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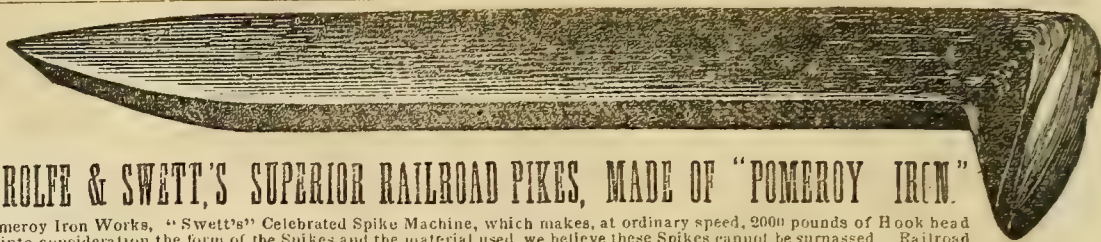
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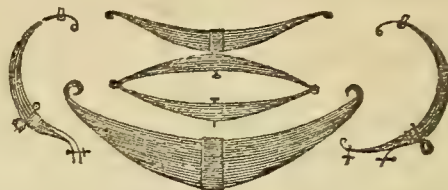
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WALTER McQUEEN Sup't.

Aug 15



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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

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THURSDAY MORNING, JULY 8, 1858.

Railroad Record

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COMPETITION.

We feel free to confess that we are in favor of competition in all things, not even excepting railroad matters. But it does seem to us to be silly for corporations to carry the warfare to that point to which it has been carried by the New York Central and the New York and Erie. It is a warfare in which neither can make any thing, and in which the last named road at any rate can lose nothing, having nothing to lose. It is, of course, useless to appeal to the *interest* of those holding stock in a company that is sinking money by the million annually to call on them to change the directory, or this or that, or the other,—it is all one to them, no matter what the course is that may be pursued, the result will be the same—the stockholders will receive no benefit from their investment

When the present dynasty was inaugurated there was a grand flourish of trumpets about retrenchment in the “small matters” which were supposed to constitute a portion of the *imaginary* revenue of a railroad, while the more weighty affairs were entirely overlooked or at best received but a slippery attention. It is also true that the Central has nothing to gain by driving the Erie into the hands of the Bondholders by ruinous tariffs. Under the present condition of affairs, the Central, with say twenty-three millions of stock and eleven millions of debt, with a reasonable business and fair competition, can pay their interest and a good dividend, while the Erie, with say ten millions of stock and twenty five of debt, will find it hard work to meet their interest alone under the same favorable circumstances; but should the Erie be driven to desperation, and in consequence fall into the hands of the bondholders, and then represent but twenty millions, it is easy to see that they will then have the advantage over the Central, and will be able, supposing other things to be equal, on a one-third lower tariff to pay the same dividend that the Central does. Hence it is not only folly but suicidal on the part of the Central to force the Erie to take extreme measures. Hence, it is the interest of the Central to keep the Erie Railroad in its present shape, whereby it will be forced to maintain something near living tariffs.

While speaking on this subject, we will remark, that we think Mr. Moran has taken the best possible course to swamp his concern that could be pursued. The last resolution of the Convention of Railroad Officers held at Buffalo, to investigate the alleged violation of the *paying tariff* agreement by the Erie and Central roads, was as follows:

Resolved, That the New York and Erie Road be requested to advance on its passenger rates to the prices prior to the recent reduction, which rates shall remain uncharged to the 15th of July next, and that a committee of three be appointed by this Convention to enquire into the difficulties between the Erie and Central Roads.

To this Mr. Moran protested, and declared that the Erie Railroad would not be bound by it, and would work out its own interest independent of the Convention or those composing it. It is but folly, and another mark of the incompetency of the \$25,000 president, to suppose that the Erie or any other road can sustain itself against the combined influences of all its feeders. It can not be done, and the sooner the management begins to act with common sense, the better will be their chances of escaping dissolution. There is really business enough for both the roads, at paying rates, and there is no reason why they should not have them, except the stubbornness and stupidity of the officials of these belligerent lines of railroad.

THE INDEPENDENCE RECORD.

What we Americans call “Independence Day” is just past. But what ideas are suggested to us, by the fact of Independence? It is perfectly certain that a Declaration of Independence, made by some small and weak state, like Saxony or Bavaria—or, even such populous countries as Hindostan, would mean nothing. The heart of a people may be the bravest and freest on earth, but they must have something else to make them *independent*. They must have *power*, both physical and intellectual. When our Declaration of Independence was made, we had one *negative* strength, and from the courage and effort of the people, of great magnitude. This was the ocean. There was no power in America, equal to our own, and the ocean was a barrier between us and Europe. It is true, that fleets and armies were sent here on one side to conquer, and the other to aid us. But they were not and could not be of such crushing force as they would have been, had we been where Ireland is. Half our strength was in our position, with no strong power on our own continent, and the ocean between us and Europe. Can there be a doubt, that such inferior powers as Denmark, Sweden, or Belgium, would be crushed at once if any one of the great powers of Europe were to put forth its strength against them? These smaller powers exist by sufferance of the larger, and in fact by the necessity of preserving what is there called the balance of power.

Let us pass down farther. We at length acquired an acknowledged Independence, but that did not convince the world that we were really capable of maintaining it. In fact, we were still weak. We were a small nation for many years, and our commerce was plundered on the ocean, with as little care or remorse by the belligerents of Europe, as if we really were no stronger than Denmark or Sweden. Of course this could not be borne, and we fought for independence again, and we maintained it.

But, the fact, came out, that we were not yet a very strong nation. The Capitol was taken, and burnt. The North-west was invaded, and many towns on the coast taken. In spite of our casual victories, and ultimate success, it was plain—that we were not powerful enough to prevent invasion. The peace was declared in 1815. Thirty years after the Revolutionary War. It is now forty years since; and the question arises, are we now, in point of fact, so completely independent, that we may defy the powers of Europe? We answer, unhesitatingly, *yes*. Our Independence is complete; but, what makes it so? Not so much because, we are tenfold in population and wealth; although, we readily grant, that to be one of the main elements. But, our great strength now, is the prodigious development of commerce and locomotion; in which, taking time and people into view, we are really ahead of every nation on earth. The ultimate cause of this is our great freedom and popular education, which together give rise to vast enterprise, and superior quickness of invention. Look for example—at the increase of navigation, and the in-

crease of Railroads. The following is a statement of the increase of shipping or tonnage, since the peace of 1815:

In 1815—Tonnage.....	1,368,127 Tons.
" 1828	1,741,391 "
" 1841	2,130,744 "
" 1851	3,535,454 "
" 1854	4,802,062 "
" 1857	4,910,843 "

The tonnage of the United States is now about *five millions of tons*, or nearly equal to that of Great Britain, and superior to that of any other nation. But, in this same period, an entirely new power, and new vessel has come into use. This is Steam, and the Steamboat, in which the United States are in advance of all nations. The use of this new and extraordinary mode of locomotion may be seen in the following statement of Steamboat Tonnage, including the same years, as that above given for the whole tonnage:

In 1815.....	29,418
" 1825.....	175,068
" 1841.....	483,607
" 1851.....	6,607
" 1857.....	705,784

Here is a steam navigation carried on by about two thousand vessels, carrying 700,000 tons! All this is the creation of the last fifty years.

Let us now turn to Railroads. They do not date more than thirty years since; and yet, behold the result.

In 1825.....	none.
" 1852.....	12,500 miles.
" 1858.....	25,000 "

The United States contains three times the number of miles of Railroad than does Great Britain, and more, we believe, than all Europe. Now the effect of this on our National Independence, is more absolute and certain, than any other element in our country. It gives the power of concentration to a degree, which has never before existed in the world.

If Washington City were to be again invested before a fleet could sail from Norfolk to Washington, an hundred thousand men, with all the munitions of war could be concentrated there. The capture of Washington the second time is impossible, unless we voluntarily consent to it. The combined force of the Telegraph and Railroad gives a power to an extended country like our own, which all the arts of the world before never could give. We are now independent, by virtue of science and art.

THE HISTORY OF THE SOUTHERN PACIFIC RAILROAD.

Our attention having been called to an editorial article from the *Albany Evening Journal* of June 12, 1858, which is so full of error and gross misrepresentation, that we deem an answer, even at this late date, not out of place. We give the article entire:

The History of our Southern Pacific Railroad.

It may not be generally known that we are building a Pacific Railroad. It is rather an airy, unsubstantial structure, the rails being laid nowhere except in the imagination; but it has already cost us a good deal of money.

The Road was begun about four years ago. As our Government is a Government which legislates always for the South and never for the North, it was a foregone conclusion that the Railroad must be a Southern Railroad. It must connect with Charleston and Mobile, instead of New York or Philadelphia, and must link

the states which talk of forming a Southern Confederacy to California and the Pacific Coast.

We began by sending out a corps of Army Officers to survey the Southern Route. To be sure, the country was deluded with the idea that they were going to survey all the routes, Northern as well as Southern. But they had their own instructions from the Secretary of War, (a Mississippian) and the published Report of their Surveys shows what they were. The first route they surveyed was a route through Texas. The second route they surveyed was a route through Texas. The third route they surveyed was a route through Texas. And so on to the end of the chapter—every one of the dozen routes, with but one or two exceptions, being, a route through Texas. This Texas engineering took out of the Treasury about..... \$1,000,000

The next step was to print the Surveys. Printed they were in seven magnificent volumes, with steel engravings, diagrams, etchings, colored lithographs, pictures of red Indians and green cactuses, fishes, lizards and the like, every toad on the line having a chance to get his portrait taken at the Government expense. These seven magnificent volumes (of which every library boasts an odd one, and no library in the country a full set,) cost about..... 750,000

Unfortunately for our Railroad, there was but one point in which the Surveys agreed. That was, that there was no feasible route any where, so far South, in Uncle Sam's domain, for a Pacific Railroad.

Any Government but ours would have knocked under to this necessity, and consented to build the road further North. But the genius of our institutions rose superior to the dilemma. If we could not have a Southern Pacific Railroad *inside* of our territory, we might build one around the outside of it! Acting upon this brilliant idea, we sent General GARDNER down to Mexico to buy a strip of land from Santa Anna to build our Pacific Railroad in.

The General was eminently successful. He bought a strip of country consisting of sandy desert, agreeably diversified with rocks, too barren of vegetation for the most part, to support a field mouse—all for the moderate sum of..... 10,000,000

The Mexicans, as is their custom, when any money comes into their country, immediately fell to fighting for it. They have already had nine Revolutions in consequence, and there is now a prospect of a tenth, which will exhaust the sum—Revolutions in Mexico being cheaply afforded at a million or so apiece.

And now matters had so far progressed that we set about building a Wagon Road—preliminary to hauling material for the Railroad—putting it as near as possible to the extreme Southern verge of our territory. For this enterprise and its branches Congress appropriated..... 250,000

But here arose another difficulty. In a Desert there is no water. Without water settlements are impracticable, horses perish, and even Army Surveyors can not live. The Cabinet cogitated. Another brilliant idea met the emergency. Camels! Away went Lieut. Somebody or other across the "hillovy ocean," on a pilgrimage to Mecca, and a tour through Egypt, in pursuit of Camels to build the Pacific Railroad with. Back he came with a cargo of Camels of all sorts and sizes—the Arabian Camel, the Bactrian Camel, the Camel of Asia Minor, and the Bedouin Dromedary—the double humped and single humped, and the no-humped at all. They were tied on the deck of the ship and carefully attended by Arab grooms and negro waiters. Some, devoid of enthusiasm for Internal Improvements, had the perverseness to die of sea sickness, but a dozen or two were slung safely ashore at Galveston and forwarded into central Texas to commence operations on the line of the Pacific Railroad. They cost, say..... 250,000

We do not remember whether it was at this time, or previously, that Government made the discovery that even Camels can not live without water more than ten days or a fortnight. The journey to San Francisco in that time could not be done by any Camel that ever wore a hump. Water must be had, after all, and at any cost. Fortunately for the Pacific Railroad, Geology has proved that water can be had if you only bore deep enough for it,—provided you do not happen to strike a dry spot. Ingenious Frenchmen have turned the fact to account by boring Artesian Wells, a thousand feet or so, deep. So we must have Artesian Wells. Frenchmen and augers were called to the relief of the Camels, and the Boring began. Little water, but much money flowed therefrom, say about..... 250,000

It is impossible to have a well regulated sandy desert, wherein the rights of Camels, Artesian Wells, Frenchmen and the Pacific Railroad will be duly respected by the Indians and Buffaloes, unless you estab-

lish also there a Territorial Government. Hence the necessity of erecting Arizona into a Territory. The bill lags, but it will pass sooner or later, and perhaps after there is a Government there will be inhabitants. But whether there are or not, we surely shall not grudge..... 500,000

to establish a Territorial Government to protect our Southern Pacific Railroad.

\$12,000,000

The condition of the Southern Pacific Railroad may therefore be said to stand, so far—*Expenses and Liabilities*, Thirteen Million Dollars. *Assets*, sundry Camels and Artesian Wells, seven volumes of Surveys, a sandy Territory, and some Arabs. Let no captious Northerner remark that this Thirteen Millions would have built the Railroad from St. Louis or St. Paul westward some hundreds of miles already. That might have been done, but where then would be our Southern Pacific Railroad?

The article starts with the *false* proposition, "that we (that is, the United States, as a government,) are building a Pacific Railroad." This is not true, as is well known by any school boy; but our government, like any other sensible landed proprietor, sent out their agents to investigate the character of its domain, with instructions to report such measures as would be calculated to improve the estate. The starting point of the surveys is the valley of the Mississippi, a stream that drains the continent from the Alleghanies to the Rocky Mountains, and from New York and the north-western British Possessions to our Southern States. It is a stream, too, in which both North and South have an equal interest, and from which they derive an equal benefit. From this great artery advances were made up *all* the great depressions of the continent, and it is not true that "every one of the dozen routes, with but one or two exceptions, was a route through Texas." It is true that the route of the 32d parallel is through Texas, and that of the 35th up the Canadian River, by the way of Albuquerque, also runs across a small portion of the Northern L of Texas, while all the rest are North of even this extremely unfortunate arm of our "Lone Star Sister." The next route starts from St. Louis, follows the Missouri, the Kansas, Smoky Hill Fork, and the Arkansas to Bent's Fort, Fort Massachusetts, the Cochetopa Pass, etc. It also has a branch from Fort Riley up Republican Fork, striking the Nebraska just beyond Fort Kearney, it is there joined by the next route starting from Chicago, by the way of Rock Island and Council Bluffs up the Nebraska, and which again forks with the forks of that river, the one to the Cheyenne Pass and Fort Bridger, the other to Fort Laramie, up the Sweet Water and to the South Pass, by the way of the three Buttes, Snake river, etc., to the Columbia. Finally from the head of Lake Superior with a branch from Chicago to Sauk Rapids across the small tributaries of the upper Mississippi to the waters of the Missouri beyond Fort Union, following Milk river, etc., to Lewis and Clark's Pass, and thence to its western terminus. So much for the routes surveyed. The assertion of the *Journal* that all the dozen routes surveyed,

except one or two, pass through Texas, is, hence, a gross misrepresentation.

The next thing that our querulous friend finds fault with, is the printing of those reports. This comes with an ill grace from one that has had so great an interest in printing the "Proceedings of the Provincial Congress," (two immense folios); the "Documentary History," (four large octavos); the "Colonial History," (ten quarto volumes); and the "Geological Survey," (twenty cumbersome quartos, beautifully illustrated), etc., of the State of New York, which are outside of the phat of regular Legislative printing, and if rumor does not lie, also receives a *secret subsidy* from the printing of these very same volumes, the reports of the survey for a Pacific Railroad. The twenty volumes of the Geological Survey was equally illustrated with the seven published by the General Government, with this difference that the twenty gave pictures of all the *dead* loads not only of the State of New York, but of the rest of the world besides, whereas, the seven are more closely confined to the living ones. That is about the only difference.

Relative to the amount paid by the Government for the Gadsden's Purchase, if they are dissatisfied with their bargain, we think we could find them a ready purchaser at an advanced price.

The next count in the charge, is but mere twaddle and badinage, and does not deserve a passing remark, it is scarcely equal to one-half what is annually spent by some of our County Agricultural Societies to improve the stock of their county; that relative to artesian wells and territorial governments is put in to fill up with.

On the whole, this is rather a remarkable article, emanating from one who has ever professed to advocate *all* internal improvements, the Albany overslough and Erie Canal in particular, one that is so interwoven with *sectional* interests, even in his own State, that he can not perceive the wants of any other portion except the *Central*, and whose brain is constantly harrassed in regulating the *price of wool*. We have no doubt, however, that it was merely thrown out as a "good enough Morgan," and not designed to have any permanent effect.

We would not, for a moment, have it supposed that we have one word to say against the Erie Canal or the New York Central Railroad, heaven knows that they have done a great deal towards making New York what she is, and not only that, they have aided greatly in the development of the west.

At the present our mails to the Pacific are forced to cross two oceans and pass through a foreign country before they reach their destination, and travelers have not only to brave the briny deep, but to risk their lives amidst the malaria of the tropics before they

can pass from one portion of our country to another, or else submit to a tedious foot travel of 2,000 miles, exposed to the hardships of camp life, and the brutalities of hosts of savages that have no propensities that are not held in common with wolves.

In case of war, California must either sustain herself against the foe or succumb. California, one of our youngest sisters, the brightest of the galaxy, that has furnished fifty millions of treasure annually to sustain us in the improving and developing our great country, would be plucked from the diadem, and not an effort *could* be made to prevent it. Strange indeed is it, that an advocate of internal improvements, of thirty-five years standing, should *now* commence to berate the government for undertaking to develop the resources of the country. The Erie Canal (stereotyped in the columns of the Journal) is a ditch of 360 miles in length, and cost over forty million dollars, and has benefitted New York more than ten times that amount. The Pacific Railroad would be about 2,000 miles long, and would cost a little more than double the sum that it required to build the Erie Canal, and who shall calculate the benefit that it would be to the country, not only in times of war, but in peace. It would be a band of iron, stronger than the three fold cord of love, binding our Atlantic and Pacific together. It would carry the commerce of a nation, and be an highway for the world. It would enable brethren of the Pacific and Atlantic States to defend one another in times of war, and council and aid one another in times of peace. Indeed, the only *great* want of this country, at the present time, is a PACIFIC RAILROAD, and the only thing that astonishes us is that it should be opposed under any pretense by the *Journal*, unless it is that they fear it will be pushed forward under an administration to which they are politically opposed, and hence they would have no opportunity of "getting a finger in the pie."

Railroads.

TERRE HAUTE, ALTON & ST. LOUIS RAILROAD.

The last annual report was issued in January, 1857. The present report embraces the transactions of the Company to the 1st of May, 1858.

CAPITAL STOCK.

The capital stock of the Company, as appears from the books, is \$3,011,150.

The amount of discount on stock appears to have been \$255,000.

Upon the original stock subscriptions the sum of \$59,130 58 is reported uncollected. Suits have been brought for a considerable portion of this, but it is uncertain how much may be realized from it.

FUNDED DEBT.

The funded debt of the Company consists of—1st Mortgage Bonds:

Amount due in 1862.....	\$200,000	
" " 1867.....	400,000	
" " 1872.....	400,000	\$1,000,000
The above bear interest at 7 per cent., payable semi-annually, viz: 1st February and 1st August.		
2d Mortgage Bonds:		
Amount due in 1863.....	\$1,000,000	
" " 1870.....	1,000,000	\$2,000,000
The second Mortgage Bonds bear interest at 8 per cent. payable 1st February, and 1st August.		
The above two classes of Bonds are secured by mortgages on that part of the road which lies between Terre Haute and Alton.		
1st Mortgage bonds of the B. and O. Railroad.....	\$600,000	
Amount uncollected.....	\$20,000	
Cancelled.....	3,600	83,000
		\$517,000
The above Bonds will become due in 1873, and bear interest at 7 per cent. payable 1st March and 1st Sept.		
2d Mortgage Bonds of the B. & O. R. R. due in 1869, interest at 7 per cent. payable 1st May and 1st November.....		
		\$404,000
The latter two classes of Bonds are secured by mortgages on that part of the road which lies between Belleville and Illinois-town and Alton Junction, including 1,600 acres of coal lands between St. Louis and Belleville.		
Third Mortgage Bonds due in 1874, \$1,000,000		
Unsold of the above.....	497,000	\$563,000
The above bear interest at 10 per cent. payable 1st May and 1st November, also bonds due in 1883, which bear interest at 7 per cent. payable 1st May and 1st November, secured by a mortgage of the entire road.....		
		9,000
Fourth Mortgage Bonds.		
Amount due in 1860.....	\$57,625	
Amount due in 1863.....	52,500	
Amount due in 1864.....	29,700	
Certificates of fractions.....	1,850	\$141,675
This last class of bonds were executed to the amount of \$80,000, and were designed therewith to fund the floating debt, and a portion of the coupons of the 2d and 3d mortgage bonds. They are secured by a general mortgage of the property of the Company, and bear interest on \$30,000 at 8 per cent. and \$300,000 at 7 per cent. payable February 1, and August 1.		
Of the amount payable in 1860.....	\$200,000	
Of the amount payable in 1863.....	150,000	
Of the amount payable in 1864.....	150,000	
Of the amount payable in 1868.....	300,000	
Total bonded debt outstanding.....		\$4,661,675
The total discount on bonds has been \$751,169 41.		
ANNUAL INTEREST.		
The total amount of interest annually accruing on the above total bonded debts is \$363,225.		
The total interest paid is \$1,658,024 41.		
FLOATING DEBT.		
The floating debt of the Company East appears to be as follows:		
Bills payable.....	\$367,982 20	
Individuals.....	54,943 94	
Total East.....		\$422,926 14
The indebtedness West is as follows:		
Bills payable.....	\$47,003 84	
Accounts audited.....	85,413 28	
Accounts unaudited.....	7,178 23	
Prairie City Bank and individuals.....	4,711 42	
Balances on pay rolls.....	76,300 00	
Service.....	23,570 00	
Light of way.....	17,442 40	
Taxes of 1857.....	18,918 56	
Judgments and claims.....	7,468 55	
Terre Haute & Richmond R. R.....	64,826 82	
Other accounts.....	2,663 08	
Total West.....		\$354,996 38
Total floating debt.....		\$777,922 52
To which may be added claim of Mich. South. & N. I. R. R. contracted in 1854, and payable, if allowed, in 1860, growing out of purchase of Belleville & I. R. R.....		
	71,791 00	
Simeon Ryder, similar claim.....	2,500 00	\$74,291 00
Arrears of interest, being amount of coupons past due and unpaid.....		
		198,705 00
There are a few other claims, which are unascertained.		
BILLS DUE AND BILLS AND SUMS RECEIVABLE.		
Bonds of Montgomery co.....	\$30,000 00	
Shelby county.....	11,622 46	
Individuals east.....	109,179 22	
Cash N. Y. and St. Louis.....	9,468 50	
Bills receivable in St. Louis.....	5,107 30	
Chicago, Alton and St. Louis and other roads.....	22,155 34	
Balance freight bills and mail.....	24,780 57	
		\$210,313 39

There are sundry ledger balances amounting to \$59,942 50, some of which are disputed, and all unsettled.

Amount of capital stock unpaid as above stated, \$59,130 58.

The indebtedness of the Company may be reduced, so far as the above assets are available and applicable.

The Company also own \$73,000 of the First Mortgage Belleville and Illinoistown Bonds, and \$497,000 of their third mortgage bonds, which are pledged as collateral security for a portion of the floating debt and endorsements; also about \$660,000 unissued of the fourth mortgage bonds; all of which may be applied as fast and as far as they can be made available, to the funding of coupons and payment of the floating debt.

RECAPITULATION.

Capital Stock.....	\$3,011,150 00
Funded Debt.....	4,664,695 00
Floating Debt.....	777,922 52
Arrears of interest, &c.....	272,996 00

Total liabilities.....\$8,726,763 02

The length of the consolidated line of railway belonging to the Company is 208½ miles. The total length of the sidings is 12 miles.

The Rolling Stock of the road consists of 31 locomotives;

20 passenger cars;	
5 " " second class;	
8 baggage and mail cars;	
212 box freight and stock cars;	
174 platform cars.	

The road-bed and superstructure have been much impaired by the incessant wet weather of the present season, and needs ballasting. The rails are of the T pattern, weighing near sixty pounds to the yard, fastened on oak ties, which were not all originally of the best kind, but are replaced with better as necessity requires. Several of the culverts require reconstruction. The locomotives are mostly in good order, but the cars generally require some repairs and painting.

In order to perfect the condition of the road so as to run it with speed and safety, and operate with true economy, I would seem to require a considerable further expenditure, even for present business, in respect to machinery, repair shops, station and wood houses, fencing, ballasting, and improvements at East St. Louis.

BUSINESS OF THE ROAD.

The total earnings of the Company for the year 1857, amounted to \$823,767 11.

This was derived as follows:

From 29,168 through passengers and tickets to and from other roads.....	\$208,773 14
From 192,968 way.....	226,915 75
" 167,057 635-2000 tons freight.....	306,589 64
" Rent of track, B. & I.....	41,550 00
" Mail, Express, &c.....	39,928 58

The details and sources of this business, as well as the expenses thereof, will be seen by reference to the Superintendent's Reports. The aggregate expenditures of the year were larger than were due to expenses incurred in that year, because many accounts were paid that belonged to previous years. Such was the state of the accounts and of the supplies that it was difficult also to appertion to the several months what properly belonged to them. The expenses of the road were, very large in the first half of the year 1857, and it was not until the approach of the commercial revulsion in September, that we were enabled to effect any considerable reduction. The panic in monetary affairs having the effect to stagnate business, our expectations for the fall were greatly disappointed, and a strong contraction of expenses became indispensable. In the curtailment of purchases of supplies, and the reduction of the number

of employees and their pay, a considerable diminution was effected in the latter part of the year. Yet the aggregate expenditures or payments made in the transportation department during sixteen months last, preceeding May 1, 1858, appear to have been \$770,229, or an average of about \$48,000 per month. These payments were not all in cash, but resulted in many instances from the settlement of accounts and vouchers running back into 1856.

Previons to July, 1857, three separate sets of books of accounts were kept; one set at St. Louis, another at Terre Haute, and another at New York, the Treasurer residing at the latter place.

Since the first of July, 1857, the accounts have been consolidated and kept in one set of books at the General Office in St. Louis. The Treasurer has remained at New York, latterly, engaged in funding the floating debt there, while the general duties of Treasurer have been virtually performed by a cashier and book-keeper in St. Louis.

The mode of purchasing supplies has been somewhat changed and improved, and all accounts growing out of the operation of the road have been required to be audited and approved by the Superintendent and Register in his office before payment. Further improvements in this department may be effected.

In the ticket sellers' department, a considerable reduction of expenses was effected by the curtailment of the free ticket line, and of the number of persons employed as solicitors or runners.

The road is worked in several divisions. The principal repairs are, at present, done at Terre Haute and Alton, there being machine shops at each of those places. The Belleville road, sixteen miles, is operated by itself. A small repair shop is employed at Belleville. A special train also runs from Alton to the junction, about four miles. A machine shop and engine house were completed of brick, at Litchfield, in 1857. This shop is not yet stocked with machinery.

The line has been worked generally with success and promptitude, the trains making their time and connections with regularity.

The only accident of a serious nature occurred last fall near Bunker Hill, by the washing out of a culvert, leaving the track suspended. Here a night train was precipitated into the bed of a stream, the engineer and fireman killed, and considerable damage done to the locomotive and cars.

The business of the road for the four first months of the year 1858, exhibits an increase of freight, but a small falling off of passengers, as compared with the same months of the previous year.

The receipts of the four first months of 1858 have been as follows:

	Passengers.	Freight.	Other.	Total.
January.....	\$23,075 54	\$35,393 16	\$8,060 16	\$66,528 86
February.....	17,844 49	21,944 47	8,335 16	52,124 12
March.....	32,163 53	31,084 55	7,900 16	71,148 24
April.....	37,019 25	30,458 26	7,945 16	75,422 67
	\$111,109 11	\$111,880 44	\$33,120 64	\$256,110 19

The pay-rolls for those four months, including all the officers and employees, amounted to the sums following:

January.....	\$36,269 82
February.....	21,982 50
March.....	24,746 26
April.....	25,990 83

Average per month.....\$24,497 40

The other expenses embrace wood, oil, talow, waste, timber, iron, printing, advertising,

stationery, and other minor articles of supply, amounting to an average of about \$12,000 per month.

The road has been operated for the last six months for about 56 per cent. of the gross receipts. The expenses may probably be still more reduced, in the purchase of supplies, in the management of the machine shops, and in the number and pay of officers, but the track may require some extra repairs.

The business of the road will, doubtless, be increased in future years, as the country becomes more and more inhabited and cultivated. The towns along the line are fast increasing, and as nearly every acre of land upon it is arable, and generally fertile, agriculture is rapidly subduing the entire country adjacent. Mills are also increasing, and coal and iron mines are becoming developed and enlarging our range of business. The local or way business, being our largest and most profitable dependence, should be carefully fostered. The competition of other railroad lines has brought down the tariff upon through business to a rate that does not pay so well. The improvement of the country contiguous to our line is shown somewhat in a table hereto appended, exhibiting the comparative assessed value of real and personal property in the several counties for the years 1855 and 1857. This shows an increase of \$5,207,224 in two years. Without doubt, the value of real and personal property along our line has been enhanced by the improvement in an amount exceeding its entire cost.

It is worthy of remark that, the Annual Report of the St. Louis Chamber of Commerce, for the year 1857, shows that, of the six different railroads terminating at St. Louis, the Terre Haute, Alton and St. Louis Railroad carried to that great market in 1857, the largest amount of produce.

COAL.

The Company owns one thousand acres of land at the Bluff, on the Belleville Branch, the larger part of which contains a stratum of bituminous coal, of excellent quality, and of a thickness, so far as developed, of about seven feet.

Two leases of mining privileges were made in 1856. The rent agreed to be paid was a half cent per bushel for the coal taken out, exclusive of entries, and two cents per bushel for transportation to the river; the entry coal to be carried free. A considerable number and extent of entries have been made. The quantity of coal taken out of the Company's mines, exclusive of entries, is reported at 178,796 bushels, for which the rent or bankage amounted to \$893 45, and the transportation to \$3,573 80. From the entries 295,809 bushels were taken, for which the Company received nothing, either for rent or transportation. The value of this coal at the river is about eight cents per bushel. The Company were at the expense of a switch or branch road leading into the mines, of about one mile and a twelfth of a mile in length, and costing about \$10,000.

The whole land between the bluff and the town of Belleville, appears to be underlaid with coal, and twenty-one mines are now worked, and depend on our road for transportation.

The quantity of coal transported over the road in 1857 exceeded two million bushels. The consumption of coal in St. Louis was less than usual last winter, in consequence of mild weather, and general stoppage of manufacturing establishments.

Other coal beds have been developed near the Alton Junction and at Wood river, two of which are now worked.

CONNECTING ROADS.

The most important connections of this road are the Illinois Central, connecting at Pana and Mattoon, and the Terre Haute and Richmond road, connecting with lines East at Terre Haute. At some future day a very valuable connection may be made with the Wabash Valley Line from Paris.

The number of passengers received from the Illinois Central road at Pana during the year 1857, was 7,284, and the number delivered to that road at the same point during same period, was 9,068.

The number of passengers received from the Illinois Central at Mattoon during the same time, was 9,945.

Of nine different lines crossing the Illinois Central, this road, with one exception, (that of the Galena and Chicago,) affords that line the largest passenger traffic.

By agreement with the Illinois Central road, one of their passenger cars is permitted to run through over our road, between St. Louis and Mattoon, attached to our trains, thus establishing a perfect passenger line between St. Louis and Chicago. Passengers are ticketed by this line from St. Louis to Liverpool.

The connection and running arrangements at Terre Haute and with lines east of that point, enable us to afford the shortest and quickest transit between St. Louis and the principal Atlantic cities.

The number of passengers received from Terre Haute in 1857, was 45,720, and the number delivered there was 40,766.

The amount of freight received from that point in 1857, was 23,575 tons, on which the back charges advanced as due to other roads, but collected by us, amounted to \$314,478 51.

The amount of freight delivered to that point was 8,299 tons.

Our line carried a local United States mail, the Merchants' Dispatch and Valentine's Freight Express.

By a contract with Valentine's Freight Express Company, our freights are taken across the Mississippi to their warehouse, erected for the purpose in St. Louis, and from thence delivered to the consignees. The same Company collect the charges on these freights, and with their line of omnibusses also collect passengers in St. Louis and take them to our depot, across the river, and on the arrival of our trains receive our passengers and deliver them at their lodgings. The Wiggins Ferry Company, by their boats, supply the means of transit across the Mississippi. The amount paid to Valentine's Freight Express Company for hauling in 1857, was \$45,016 98, and for the four first months of 1858, \$18,851 44.

During the summer of 1857 the St. Louis, Alton & Chicago Railroad undertook to build another Railroad, parallel with ours, between Alton and St. Louis. This was attempted under the charter granted to the "Sangamon & North-west Railroad Company." A portion of the real estate of our Company at Alton was condemned in the process, and the sum of \$1,616 awarded as damages to this Company. When the graduation of this new road was nearly completed, a contract was entered into between the St. Louis, Alton & Chicago Railroad Company, and our own, by which the Chicago Company were admitted to the use of our track from Alton to St. Louis, and of our depot at East St. Louis, with the privilege of wood and water at the

latter place, for the sum of \$5,500 per month, payable monthly, from October 12, 1857, and the work on the new road was discontinued. By further agreement the two companies were each to pay to the contractors on the new road for one year, a sum equal to 12 per cent. per annum on the amount of their expenditure on that road, to be determined by an umpire on sufficient vouchers. This amount of expenditure was ascertained and reported by L. P. Sanger, Esq., at \$65,998 98, and the monthly rent of track is, therefore, subject to the deduction of \$660, payable monthly to Mitchell & Buckmaster, the contractors.

The amount paid to the Wiggins Ferry Company for the twelve months of 1857, for "night trips" only, was \$4,080.

The amount paid to the same company for the same time by Valentine's Freight Express Company was \$16,520 91, and by the Merchants' Dispatch about \$840, making the total received by the Wiggins Ferry Company from the business of the Terre Haute, Alton & St. Louis Railroad for 1857, amount to \$21,440 91. The Chicago, Alton and St. Louis Railroad, which approaches the river by our track, probably paid a similar sum.

Bloody Island is an accumulation of sand, lying directly opposite the city of St. Louis, and east of the main channel of the Mississippi, and was formerly separated from the Illinois shore by a slough into which Cahokia creek empties. A few years ago, the ferry landing was on the main Illinois shore. It is now on the Island. The city of St. Louis, a few years since, built a dyke or highway, macadamized, from the Illinois shore across the Island to the water's edge of the Mississippi. The county of St. Clair, in 1849, required and received from the city of St. Louis, a bond of indemnification in the sum of \$20,000 against any damages that might accrue to their ferry right, in consequence of the building of the dyke. That ferry right was transferred to the Belleville and Illinois River Railroad Company, now consolidated with the Terre Haute and Alton, for the consideration of \$18,000, which was paid to that county. The dyke has caused a considerable accretion to the Island below, and obstructed the old ferry route and landing. The road of the consolidated company now runs through their own right of way, across Cahokia creek, to Bloody Island, below the dyke, and curving, runs up the Island to the Western terminus of the dyke, where, with the permission of the Wiggins Ferry Company, our depot, a temporary wooden structure, has been built. The Wiggins Ferry Company have given us notice that the ground thus occupied by our depot, is required for purposes of their own. We shall, therefore, be under the necessity of condemning the ground now occupied by our road and buildings, or of changing our position on the Island, and of resorting to our right of way there, situated about a quarter of a mile below the present depot, and immediately opposite the Spruce street ferry landing in St. Louis. This right of way was condemned by commissioners duly appointed some years ago, and is 300 feet wide from the main Illinois shore to the water's edge of the main channel of the Mississippi River. True policy seems to dictate the propriety and necessity of making a permanent improvement for our uses, of this right of way, to be followed by such use of our ferry right as interest may point out. With this view, we have recently had our right of way surveyed and plotted, levels taken, and estimates

made of the probable cost of the improvement. If a depot building and grounds, of capacity sufficient to accommodate our passenger and freight and coal business, were prepared, and all our general offices transferred and concentrated there, and all our contracts for the delivery of freight and passengers made to terminate there, we should accomplish such a saving of expense and trouble, as would at once commend the improvement for the cordial approbation of every person having a pecuniary interest in the affairs of this road. The completion of the whole, 300 feet wide, suitably revetted with stone, the front properly macadamized, and with a commodious building for depot and offices, would probably cost not less than \$100,000. A track of less width, and building less commodious, might answer temporarily present necessities, and would cost, of course, a less sum.

The financial condition of the company rendered it indispensable that steps should be taken to obtain an extension upon the floating debt, and a portion of the interest coupons. With this view, a Financial Committee was appointed last year, and about \$141,000 of debt, and \$35,000 in amount of coupons, have been funded in 4th mortgage bonds. It is very important, as well for the comfort of the managers of the road, as for the interest of the creditors, that the floating debt and a portion of the coupons should be funded. Let those embarrassments be removed, and the road be placed upon a proper basis for economical management, then we may reasonably anticipate that the ordinary business of the line will be sufficient to pay, at least, the current expenses and interest. The gradual improvement of the country, and consequent increase of business, with prudent management, will give hope of future remuneration to the stockholders.

THOMAS ALLEN, President.

St. Louis, June 7, 1858.

TABLE A—Showing amount of Gross Earnings in Transportation Department, from January 1st, 1857, to May 1st, 1858.

	1857.
Passengers.....	435,698 69
Freight.....	306,369 64
Rent of track.....	41,550
Other Sources.....	39,928 58

Total.....\$823,767 11

FIRST FOUR MONTHS OF 1858.

Passengers.....	\$346,808 00
Freight.....	418,480 08
Rent of track.....	41,550
Other Sources.....	73,049 22

Total.....1,079,887 30

MORE ABOUT THE SOUTHERN PACIFIC RAILROAD.

[From the Marshall (Texas) Republican.]

On Sunday last, Messrs. J. Fowlkes, C. S. Todd, Thomas B. Lincoln, D. C. Wilder, Thomas H. Wiley, William H. Street, &c., President, Directors and officers, lately elected in New Orleans by the Stockholders of the S. P. Railroad, arrived in this place, with the books and papers, and have opened an office here in compliance with the law of the last Legislature. We learn from these gentlemen that over two-thirds of the stock was represented at the meeting in New Orleans, and that the greatest unanimity of sentiment and feeling prevailed. Resolutions were passed denouncing the sale under the deed of trust as fraudulent and void, an abundance of money was promptly raised to vindicate their rights, and a firm determination expressed to prosecute the matter to its consummation.

Such is the statement we have received, not

only from these gentlemen, but from other sources of respectability. We are not at all surprised at it. It was not to be expected that the thousands of *bona fide* Stockholders scattered over the Union, who have invested their money in this enterprise in good faith, would quietly submit to have themselves sold out in this summary manner without a struggle.

How, we ask, will the new company explain away the circumstances connected with this deed of trust, and the sale under it? Will they be able to separate themselves from the conduct of Mr. Yerger, as connected with this transaction? If, as alleged, a crisis had arisen in the affairs of the company, by which the charter was about to be sacrificed, was it not the duty of the President to have telegraphed to every section of the country, and have called the stockholders together? If that was impracticable, he should, at least, have obtained a full board of directors.† And if there was not sufficient time for that purpose, and a deed of trust was inevitable, why give the right to sell, at ten days' notice, a valuable franchise and property worth a million of dollars, in an interior town, remote from the commercial marts of the Union? How will it be explained, that, in this deed of trust, the President and officers are made preferred creditors? Can they defend the action of the President by which claims for stock were converted into a moneyed indebtedness, and incorporated also as preferred claims.‡

In December the President announced that arrangements had been made to satisfy the claims under the deed of trust, and it appears from subsequent arrangements that \$50,000 was the amount required by the first of April. Why did not Mr. Yerger pay his stock subscription of \$30,000, which would have rendered the deed of trust unnecessary or afforded subsequent relief? He not only did not do this, but we have seen letters addressed to parties from whom the company expected to receive large sums of money, written under the authority of the President, advising them not to pay. Every one must see that it would not be a very easy matter to raise money under such a deed of trust, and with letters addressed to parties not to pay, it would be impossible. And at the very time when the company was in this embarrassing condition, we find a receipt of which the following is a copy:

"Received from Geo. S. Yerger, Esq., President of the Southern Pacific Railroad Company, six hundred dollars on account of my commissions as Trustee under the deed of trust, executed in the city of Marshall, on the 19th of October, 1857. JOHN K. YERGER.

NEW ORLEANS, May 8, 1858."

A receipt for commissions on the sale, before Mr. John K. Yerger's advertisement had appeared in the Marshall papers!

How is all this to be explained? And whether true or false, do these facts not justify the belief entertained abroad, that the sale was a fixed and foregone conclusion, which no management within the range of possibility could avert?

But if these are insufficient, they are strengthened by the attempt to prevent the publication of the deed of trust, after it was placed on record, and the passage of a law at the last session of the Legislature, intended to legalize such sales.

The property was advertised in the Marshall papers on the 8th of May, and the sale took place on the 1st of June.

What were the circumstances connected with the sale? Was not an arrangement made in

advance before the sale (the parties intending to buy finding they were not likely to have any competitors,) that the property was not to sell for over \$40,000? Did not one of the Trustees object to the arrangement, on the ground that the commissions would be too small, and was it not compromised by an agreement to pay commissions on \$250,000? What was the reason of this? Was it to avoid the question of personal liability? Was it not announced that the sale was for cash, and if not paid in *thirty minutes*, the property would be re-sold at the risk of the purchaser? And, at the very time this announcement was made, was it not an understood matter that Col. Long was to receive an indemnifying bond? Did he not insist upon it as a *sine qua non*? How much cash was paid? Was that not a matter regulated entirely by the parties in interest?

Public rumor gives an affirmative answer to all these questions. If untrue, they can be denied. If true, do they not furnish sufficient evidence to condemn this sale, legally and morally?

But we contend that the deed of trust, outside of all this array of evidence to condemn it, is valueless for three considerations: First, because the directors had no legal authority to make it. The law of the last session of the Legislature provides, that before a deed of trust can be given, it must be authorized by the by-laws of the Company, which must be sanctioned by two-thirds of the stockholders. Secondly, that without such a law, a franchise can not be alienated. And thirdly, no incorporation possesses the right to prefer creditors.

If, then, the deed should prove invalid, and a claim for damages should be sustained by the old company, we ask what will be the condition of every stockholder in this new concern? Will not every one of them be personally liable to the amount of their property? This is a matter worthy of their consideration: for while an individual in a legally organized incorporation would be liable only for the amount of his subscription, he would, perhaps, in a question of damages arising under a trespass be bound to the amount of his property. (?)

PIKE COUNTY RAILROAD.

The Route for this new Road commences at a point opposite Naples, running on the river bank to the mouth of Flint Creek, following that stream to within one mile of Griggsville, curving on the half-section line, one-half mile south of Griggsville, following said line west, passing over one-half mile south of Maysville, same distance south of Salem, crossing the Naples and Hannibal Road. One half mile west of Salem the line takes a north-west direction over Bay Creek on the "Divide," which it follows to Barry, passing one quarter of a mile north of the centre of that place, directly through Kinderhook, and terminating at Douglasville, opposite Hannibal, on the Mississippi River. Fifteen miles of the Road is graded, and ties enough delivered to lay track on same distance. All the ties that have been made are of the best white or burr oak.

The length of this road is about 40 miles, and the estimated cost will be about \$16,000 per mile. This will be the connecting route between Hannibal and St. Joseph on the West, and the Great Western of Illinois, passing through some of the best lands in the country. The people along the line of the proposed route have subscribed liberally to the stock, and by a little exertion the whole road could be completed in twelve months.—*Chicago West. Railroad Gazette.*

CULTURE OF THE VINE IN THE S. W. ALLEGANIES.—No. 2.—(Concluded.)

BY DAVID CHRISTY.

Remarks.—Probable Exemption of the Grape from Mildew and Rot in the S. W. Alleghenies—Adaptation of their Soils to the Production of the Best Flavored Wines—The Extent of Territory adapted to Grape Culture which they will afford—Mr. Guerin's Letter.

In closing this investigation, we should consider it incomplete without the addition of the Letter of Mr. N. E. Guerin, whose vineyard we visited in 1857, and who has generously furnished a detailed statement of his plan of operations. The illustrations were drawn by himself. And we must take this occasion also to say, that the attainments of Mr. Guerin are of a high order, both in literature and science; and that, from his observation and experience, he is eminently qualified to act as the pioneer in the development of vine cultivation in the Southern Highlands. To this end he is making such arrangements for storing his wines, in the coolness of his mountain home, as will enable him to purchase the vintages of all the colonists around him, and thus to afford them a market, at their own doors, for the products of the labor of their hands.

[Written in French—Translated by JAS. W. WARD, Esq.]

VINONA, September 7, 1857.

MR. DAVID CHRISTY:

My Dear Sir.—I received, two days since, your letter of the 15th of August, dated at Huntsville, Alabama. It has been the more agreeable to me, since I find by it that you have not forgotten us. It is with pleasure that I now reply, in regard to the information that you have requested, in relation to the cultivation of the Vine here. It is now about ten years since I came to Tennessee, with Mr. E. Bayer, for the purpose of assisting him, as agent, in the management of nearly two hundred thousand acres of land, which he had bought, for speculation, in the counties of Polk and Monroe. The three first years were spent in verifying the titles, and locating the lands situated in the mountains. I was every where struck with the abundance of wild vines, that I found growing luxuriantly at different elevations; and it was this that first gave me the idea of attempting the vine culture—in other words, of commencing a little vineyard. I was the more inclined to proceed with prudence, that I knew that several Swiss and Germans had already failed in similar undertakings. However, having pursued a course of Agriculture and Botany, with Mr. Thoin, in France, and having spent a long time in the Vine country of South and Middle France, I had hopes of remedying the obstacles that had discouraged my predecessors. I obtained from New York, twenty-four plants of the Isabella, and two of the Catawba, together with several species of the Vines of Europe—the Chasselas, Tokay, etc. The last I very soon abandoned, discovering that they would not succeed; from the Isabella and Catawba I found that good results could be obtained.

And this is the manner of planting that has best succeeded with me and that we now follow. In the first place, we avoid the valleys and bottoms; all our plantations being placed

* The financial crisis occurred early in September; the deed of trust was executed on the 19th of October.

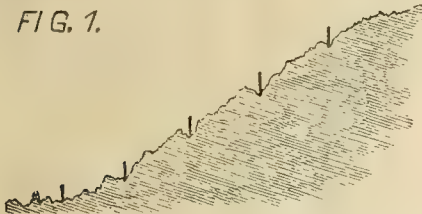
† Mr. Archer states that there were only three directors present when the deed of trust was authorized.

‡ These formed a portion of those given for the transfer of the Texas charters.

on the declivities of the hills, starting at the height of about six hundred feet above the Ocoee. Not having a barometer with me, the height above the ocean I can not tell. The experiments made on the banks of the river and in the valley, have always resulted badly. The inclination of our mountains, is generally forty-five degrees; we are therefore obliged, in order to avoid the washing away of our lands by the rains, to cultivate the whole in terraces. The most economical manner of proceeding is the following:

Draw horizontally a deep furrow, with a good hill-side plow; and above this another, at the distance you wish to have between the vine rows; and so on to the top. You then plant the cuttings in the furrows, three feet apart, and fill up the furrows with the surface-earth lying above it, pressing it lightly around the plants, taking care that the earth thoroughly fills up the furrow from top to bottom. [See cut No. 1.]

FIG. 1.



By means of the plow, passed between the rows, the earth is then brought to the level of the bottom of the upper furrow, which leaves about two feet of loose earth, through which the roots can extend. [See cut No. 2 and 3.]

FIG. 2.

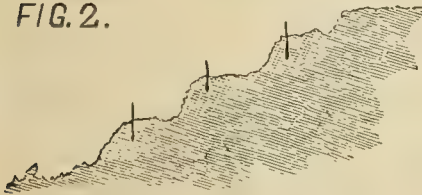


FIG. 6.



I never apply manure to the roots; whenever I use any, I always put it on the surface, and turn it in with the plow.

During the first two years, I let the vines grow as they will, without trimming; the third year I trim to two buds; [see cut No. 4.] the fourth year I add ano-

FIG. 3.

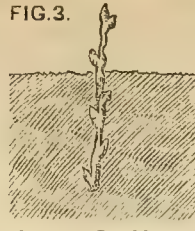
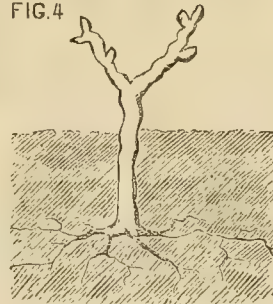
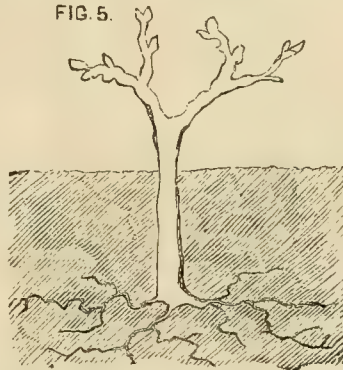


FIG. 4.



ther branch—leaving two to each plant—and give to each branch three buds. [See cut No. 5.]

FIG. 5.



The vines now begin to bear; and at the sixth year the work is completed, and the vineyard is in full bearing. [See cut No. 6.]

All my branches are kept as low as possible, the berries maturing better and producing larger bunches. If you could see our vineyards at this time, you would be astonished at the quantity of grapes we have, and at the beauty of the fruit. The rot, of which complaint is made in so many places, has done us but very little harm, and only this year; attributable, we think, to the prolonged rains. I am careful, each year, in the months of February and March, to uncover my vines to the depth of six or eight inches, and remove from each cutting all the fibers or rootlets, which have grown along the stem, and above the lower roots at the base; I then break up and turn back the soil, plant the stakes, and immediately after proceed

with the pruning. The vintage should not take place till the grapes are perfectly mature; which they are, here, at the end of September or beginning of October. I break off about half of the stalks, or peduncles, and crush the grapes between two cylinders of wood, and throw the must into a large vat holding about one hundred and fifty gallons, which is filled to within a foot and a half of the top; the vat is then closed with a lid, and the whole left to ferment for a period of ten or twelve days. The clear wine is then drawn off and put into a cask or a fresh vat. In the month of December, the wine is transferred to another cask, and again fined and drawn off the following February. It is then ready for market. Our wines keep very well, and like those of France, improve in quality by age. I make but very little sparkling, on account of the breakage of the bottles; some that I have made from the Isabella grape, has much of the flavor of the French Champagne, differing from it only in color. I shall have, the coming season, from twenty to twenty-five acres in vines, the other settlers are also extending their plantations, now that we see that it will become a good business.

The vine here produces a third more than it does in France; and the wines may be made of as good quality; they differ only in bouquet, and that depends upon the species of grape we now grow. I hope, however, within two years, perhaps, to obtain the flavor of the French wines, by means of a new species of grape that I have now in my nursery, and which gives absolutely the flavor of the grapes of our country.

A vineyard of an acre, six years old, well cultivated, will yield from four hundred and fifty to five hundred gallons of good wine. As you know, we are upon mountains of primitive and transition rocks, through which the water finds an easy filtration; and it is to this fact that we attribute, in a great degree, the healthiness of our vines; the roots of which are never drowned in water; as they would be, if we had a base of limestone and impermeable clay. N. E. GUERIN.

In relation to pasturage, enough is not known to warrant a positive decision. Experiments upon the grasses and clovers have been limited in the districts over which I passed. On the low grounds they do well, and a few places in the mountains were visited, where timothy, herds-grass and clover, were growing as vigorously as they are usually found to do upon similar soils in the north. Many of the mountain-sides and coves are covered with a rich loamy soil, possessing ample fertility for the growth of any of the usual crops of the farmer. But as a large portion of the land, if plowed, would be liable to wash by rains, it can only be commended for pasture and grape culture. As the amount of rain-fall exceeds that of the region of Pittsburg; and the soils are as fertile as any there, excepting the limestone lands; and the altitude will compensate for latitude, so far as temperature is concerned; there would seem to be no reason to doubt but that the Southern Highlands will be as favorable a region for wool-growing as that of Western Pennsylvania.

☞ The work of completing the Lake Superior Railroad, between Oshkosh and Fond du Lac, and between the Fond du Lac Junction and Watertown is progressing finely. The cars will reach Oshkosh promptly on the first day of August.

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE
BY HEWSON AND HOLMES,

July 7, 1858.

BONDS.

\$5,000 Little Miami R. R. Co 6 per cent.	
1st Mort. Bonds.....	81
\$4,000 Cin. Ham. & Day. R. R. Co. 7 per cent. 2d Mort. Bonds.....	72
\$6,000 Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	45
\$2,000 C. v. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	33
\$3,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	72½ and int.
\$2,000 Cin. Ham. & Day. R. R. Co. 7 per cent. 1st Mort. Bonds.....	85
\$4,000 Ohio & Mississippi R. R. Co., 7 per cent. Construction Bonds.....	25

STOCKS

40 Shares Little Miami R. R.	73
25 " Cin. Ham. & Dayton ..	40
150 " Ohio & Miss. R. R.	5
60 " Indianapolis & Cincinnati ..	36
24 " Columbus & Xenia ..	72

MONETARY AND COMMERCIAL.

Since our last we have passed safely through another "heavy" day—the 3d inst., which included the payments of three days. The promptness with which the demands upon our business men were met, is another proof of their stability. Money continues plenty at reasonable rates, and there is every reason to believe that the supplies for the fall trade will be furnished without trouble.

The flattering prospect of abundant crops, also gives promise of a brisk fall trade, for which our merchants are already preparing.

The excess of currency causes a decline in Exchange, and the market closes dull at ½ per cent.

The following fact in relation to the New York market we cut from the Times of that city, and it affords a fair criterion by which to judge of the market there.

The Times states that some October and November bills, good dry goods names, indorsed, could not be had yesterday better for the buyer than four per cent. per annum, and that some of the bank Presidents are in the street for August and September paper at the same rate. We have heard this morning of some considerable parcels having been taken from the street during the week, on bank account, at four to four and a half per cent.

We give quotations from Hewson & Holmes' circular of yesterday.

The movement of the stock market in the last week has been entirely devoid of interest. Occasionally symptoms of slight improvement, manifest themselves only to give place to a duller market and drooping quotations. The oppressive heat and the absence of many operators from the city, add to the general dullness in all departments of business.

The wheat harvest is now in full blast, and all the reports we have of the quality and quantity of this important cereal are of the most encouraging character. The hay crop also promises to be one of surpassing abundance. Corn also looks remarkably well, and with seasonable weather, during the next 70 to 80 days will realize a full average crop. These facts when properly considered, must cause capitalists and merchants to look forward to the fall business with encouragement and confidence. With no further untoward circumstance, the Railroads will soon have abundant business in freighting the surplus products to Market.

Money is abundant for strictly good paper at reasonable rates, but for second and third class signatures, it is difficult to be had, at from 2 to 3 per cent. per month.

We note sales of Little Miami 6 per cent. bonds, at 81. Hamilton and Dayton 2d mort. 7's at 72. Covington and Lexington 2d mort. at 45, and 3d mort. at 33. Indianapolis and Cincinnati 2d at 72½ and int. We also note a small sale of Hamilton and Dayton 1st. mort. at 85. In stocks we have but few sales to report, among which are Little Miami shares at 73. Indianapolis and Cincinnati at 36; Hamilton and Dayton at 40, and Columbus and Xenia at 72.

Exchanges are dull. We quote New York and Eastern Cities generally, ¼ to ½ prem. New Orleans ½ prem, St. Louis ¼ prem., payable in specie. Gold ¼ to ½ prem.

CHICAGO, BURLINGTON AND QUINCY RAILROAD.—At a meeting of the stockholders of the Chicago, Burlington and Quincy Railroad Company, held at the office of the company in Chicago, pursuant to public notice, on the 25th day of June instant, 29,508 shares of the stock out of 46,315 shares were represented. The following persons were unanimously elected Directors for the ensuing year:

John Van Nortwick, Batavia, Ill.; Chauncey S. Colton, Galesburg, Ill.; Isaac H. Burch, Chicago, Ill.; James F. Joy, Detroit, Michigan; Erastus Corning, Albany, N. Y.; Nathaniel Thayer, Boston, Mass.; John M. Forbes, do.; Robert B. Forbes, do.; Sidney Bartlett, do.; John W. Brooks, do.; Edward L. Baker, New Bedford, Mass.

Isaac H. Burch then offered a series of resolutions which were adopted without opposition.

At a subsequent meeting of the Board John Van Nortwick was re-elected president; Edward L. Baker, chairman of the meetings of directors; and Amos F. Hall, secretary for the ensuing year.—*Western Railroad Gazette.*

CLARKSVILLE, MEMPHIS, AND LOUISVILLE R. R.—The annual election for Directors of the Clarksville, Memphis, and Louisville Railroad Co. occurred on Saturday, the 26th ult., and resulted in the election of the following named gentlemen:

Alfred Robb, Wm. A. Quarles, R. M. House, W. B. Munford, J. C. McKoin, Wm. Broadbuss, James C. Johnson; G. A. Henry, W. A. Forbes, John K. Smith, Charles M. Hiter, R. W. Humphreys, W. H. Drane, S. B. Seat, and T. W. Wisdom.

At a meeting of the Directors, Col. Wm. A. Quarles was elected President.

RAILROAD TRACK DISPLACED BY THE HEAT OF THE SUN.—On Wednesday, one of the trackmen on the railroad between Rochester and Buffalo, N. Y., discovered that the rails were bent in two places, and an examination showed that the heat of the sun had so expanded the rail, that it had curved each way—it being the combination rail—fully six inches out of line. All this expansion must have taken place within two or three hours, as not more than that time had elapsed since trains had passed over the track. The discovery was made just in season to warn an approaching train of the danger.

DEATH OF A VENERABLE LADY.—The Mississippi papers record the death of Mrs. Mary M. Gwin, the mother of Senator Gwin, of California, in the 87th year of her age. Mrs. G. was a member of the M. E. Church for over 70 years, and her husband, Rev. Dr. Gwin, who died in 1841, was a minister of the same denomination for more than fifty years, and one of the early pioneers of the Western and South-western States. For a long series of years he enjoyed the intimacy and confidence of Gen. Jackson.

The tolls of the Ohio Canals have been reduced. The Board has issued the following notice:

OFFICE OF THE BOARD OF PUBLIC WORKS,
COLUMBUS, JUNE 27, 1858.

JOHN A. WHEELER, Collector of Cleveland:

The following orders were this day passed by the Board of Public Works. Printed copies will be forwarded as soon as they can be had:

Ordered, That on corn, flour, fish, oats, pork, salt, wheat, and whisky, when transported from Portsmouth, Waverly, Chillicothe, Circleville, Carroll, and from all points on the Hocking Canal, Columbus and Port Washington and Zanesville, each inclusive to the Lake, and on fish and salt from the Lake to the above points, the tolls shall not exceed 25 cents per 1,000 pounds.

Ordered, That on corn, flour, fish, oats, pork, salt, wheat and whisky, when transported from Massilon and Akron to the Lake, and on fish and salt from the Lake to the above points, the toll shall hereafter be four mills per mile, and not exceed 25 cents per 1,000 pounds.

This order shall remain in force until further notice.

ABNER L. BACKUS,
Acting Com'r.

ROCK ISLAND AND ALTON R. R.—The Schuyler Citizen of the 23 inst. says there were at that date 105 laborers employed upon this road in Schuyler county, and that during this week the number would be increased to 250. It is expected the road will be made ready for the iron from Rushville to the McDonough county line by the setting in of cold weather.—*Western Railroad Gazette.*

THE SCHUYLER FRAUDS IN COURT.

(From the New York Post, June 30.)

An important decision was rendered yesterday by Judge Comstock of the Court of Appeals, in the case of The New Haven Railroad Company v. Schuyler, Cross and 328 others, which was brought against all the owners of the spurious stock issued by Schuyler, for the purpose of determining the respective rights of the claimants and the company in one suit. The Court of Appeals having overruled the decision of the courts below, that the Company were bound in some way to make good the false certificates, it became the duty and the right of the Corporation, which, under the circumstances, the Judge compares to "a natural person clothed with the legal title to, and in possession of, an extensive line of railroad, receiving the gross earnings for the purpose of dividing the net profits amongst a large class of individuals," to call the false claimants into Court, in order to remove the cloud upon the equitable interests of those whom it represented.

The relief which equity would give under the circumstances would depend upon whether the invalidity of the spurious certificates appeared upon their face, in which case no occasion could arise for a suit in equity to decree their cancellation. On the other hand, if, as in the present case, they are not distinguishable from the genuine ones, and are capable of being used as a means of annoyance and vexation, the court hold that the corporation can demand a cancellation of the stock, and maintain a suit in equity for that purpose. As no just claim against the corporation arises out of the false certificates, their existence, uncanceled, of necessity exercises a depressing influence upon the real stock of the corporation, and this depression can only be removed when all the certificates are cancelled.

A decision against one of them in an action founded on it, is not a determination against any other one; and thus, if the Company were obliged to sue on every spurious certificate

outstanding, the multiplicity of the suits, and the indefinite period which the determination of all of them would consume, would keep the genuine stock depressed to a degree unwarranted by any rule of equity.

Under these circumstances it becomes necessary to determine whether all the holders of spurious stock can be joined as defendants, so that the Corporation can settle the question in a single suit, instead of bringing upwards of three hundred and thirty separate ones, and at a correspondingly reduced expense. The Court below sustained the demurrer interposed by the defendants to the Company's complaint on account of multifariousness.

On this point the Court of Appeals distinctly rule that where there is a single interest in the plaintiffs directly opposed to all the interests of the defendants, whose rights, however, rest upon separate instruments, all of which are of the same nature, the defendants can be joined in the same action. The demurrer is accordingly overruled.

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Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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MANUFACTURERS OF

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ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellow Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tinture Presses.

No. 98 Pearl Street, Cincinnati

1,200 Keers No. 1 Railroad Spikes, 5½ by 9-16th.
low by Corby, Gossin & Co.'s make for sale very
low by TRABER & AUBERG,
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TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside

surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding neater perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
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The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

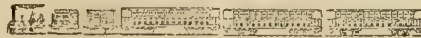
Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, {
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

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AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

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Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation; the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jackson, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pans, Peoria, Danforth, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

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H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
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ar Broadway, New York.

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MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

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Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even

ing. Freight will have prompt dispatch over this road, and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Sup'l.
Racine, May 15, 1857.

H. S. DURAND, President.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap'3 41 East Second Street, Cincinnati, O.

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No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

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To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.
July 14, 1857. jy23-1m

D. M. CARHART.

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

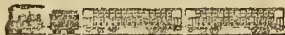
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Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased in this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.
Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN. EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 209 South Third St.,

PHILADELPHIA.

[aug

STEPHEN MORRIS,

THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,

S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard, 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.]

J. H. GOODMAN & CO.,
No. 7 Wall St., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,

ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro
JOEL C. LANE

feb4tr

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trestling B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging—44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George E. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860. W. B. MUNFORD, President.
Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars, Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Marketst.,

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MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges

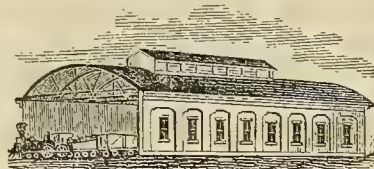
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.
Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburgh, Mass., having associated himself with Messrs. Wetteman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

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Consulting Engineer,

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64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C.

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GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; we adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—'y

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

Mar. 25, th

VOSE, LIVINGSTON & CO.,

8 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
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6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

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And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

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Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

ap10 Supt Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

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LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank
Book Manufacturers,

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LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson

Connections are made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

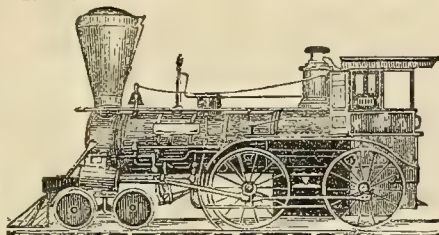
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbestime, which is seven minutes faster than Cincinnati time.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap20 MOORE & RICHARDSON.

1858 CINCINNATI AND ST. LOUIS.

Through without Change of Cars,
OHIO AND MISSISSIPPI
(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union Office, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
Jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.
7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:50 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

OFFICE OF PITTSBURG AND CONNELLSVILLE R. R. Co.
Pittsburg, May 18, 1858.

PROPOSALS WILL BE RECEIVED at the Office of the Pittsburg and Connelleville Railroad Company, in the city of Pittsburg, until the 15th of June next, inclusive, for the GRADUATION, MASONRY, BRIDGING, TRESTLING, STATION, BUILDINGS AND RAILWAY TRACK, embracing the entire work necessary to the completion of the Division of the Road, of about Ten and One-Half Miles along the Monongahela River, between Pittsburg and Port Perry.

SPECIFICATIONS OF THE WORK are ready for examination at the Office of the Company, whose Engineer will be in attendance, and where full explanations will be given to parties making inquiry. The work will be let either in one or several contracts, and may be payable in Cash, or wholly or in part, in the First Mortgage Bonds of the Company, secured by the part of said Road to be constructed. The work is moderate and can be done expeditiously, and will be required to be completed in all the coming autumn.

By order of the Board of Directors.
ma27:3w BENJ. H. LATROBE, Presd

WAREHOUSE
No. 5 FRONT STREET
 Opposite Public Landing,
 Cincinnati, O.

PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomerooy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for sale. Also, a full assortment of the Pomerooy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chains filled at short notice.
 Cincinnati, March 5, 1856

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
 ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
 WHEELS AND AXLES fitted for use.
 HYDRAULIC PRESSES for pressing Oils and for other purposes.
 MACHINERY of the most approved construction for Flouring and Saw Mills.
 GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
 STEAM BOILERS and WATER TANKS of any size or description.
 SHAFTING, PULLIES and HANGERS.
 WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS, —AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
 East Side, between Third and Fourth Streets.
 KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
 Printed to order in the best manner.

Ruling done to order, of any Pattern.
 Blank Books of every description, with or without printed headings, got up on short notice.
 ANDERSON, GATES & WRIGHT,
 (Successors to Jacob ERNST.)
 112, Main Street, Cincinnati

J. T. CRAPSEY,
ATTORNEY AT LAW,
 OFFICE:
N. W. Cor. Walnut & Sixth streets,
 CINCINNATI

SCHENECTADY Locomotive Works, SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES, AND TENDERS, AND RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Aug 16. ly



MCDANIEL & HORNER, LOCOMOTIVE AND CAR MOTIVE SPRING

MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.
 McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.
 NORRIS BROTHER'S, Locomotive Builders, Philad.
 A. C. GRAY, Prest. New Castle Manuf. Co.
 U. WELLS, R. R. Car Manuf. Petersburg, Va.
 I. R. TRIMBLE, Supt. Philad. R. R. Co.
 M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.
 EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.
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 THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

G. G. LOBDELL. H. S. M'COMBS. D. P. BUSH.

BUSH & LOBDELL, Wilmington - - - - - Delaware.

MANUFACTURERS OF CHILLED WHEELS AND

TIRES, For R. R. Cars & Locomotive Engines,

ARE PREPARED TO
 Execute Promptly Orders to any Ext nt
 FOR THEIR

CELEBRATED WHEELS, EITHER SINGLE OR DOUBLE PLATE. WITH OR WITHOUT AXLES.

WHEELS FITTED To Hammered or Rolled Axles. In the best manner, at the shortest notice, and on the Most Reasonable Terms.

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Harlan & Hollingsworth,
 WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

DINSMORE'S PUBLICATIONS.

RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents, with Time-tables only.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents, with a complete Steamboat Directory.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated. No. 1.

CONTENTS.—Peter Punk Shops; Patent Safe-Swindling; Pickpockets; Garroters; Gamblers, etc., etc. Price, 10 cents.

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DINSMORE & CO.,
 9 Spruce Street, New York.

HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the true of its indications showing the fact high of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and it by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
 3730 No. 66 Broadway, N. Y. 1



Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING.....JULY 15, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street,

Subscription THREE DOLLARS per annum, in advance.

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One square, single insertion	\$1 00
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THE MISSISSIPPI AND MISSOURI R. R.

It is stated in the Council Bluff *Bugle*, that FORTY MILES of this road will be put under contract *immediately*, if the County Judge and the County authorities of Douglas County, N. T., will each issue \$100,000 of the Bonds voted in aid of the construction of the road.

The same paper states that Mr. Dodge, one of the Engineers, has these propositions in *writing*, from the proper authority, and can give the best assurance that the work will be completed within two years, if the bonds are issued. The Company propose to build and stock the road within that time. There can be no doubt, says the *Bugle*, but they will complete the work within that time, if the bonds are issued. With the proceeds of the bonds the road can be graded, tied and bridged, and the Company can easily raise the iron upon the bonds issued upon the land grant, and as for stocking it, there will be no difficulty, as the company have *twenty-one* locomotives now on hand, which are not in use.

SCIENTIFIC DISCOVERY AND ITS LIMITATION.

We have now an Annual, called an “Annual of Scientific Discovery,” a Year Book of Facts in Science and Art. Such a book is undoubtedly useful for its information, and interesting from its nature. We hope it may be continued.

Its name, however, suggests something beyond itself, and something even more important. The suggestion is, what are the limits of human discovery? Or, in what departments are discoveries *possible*, and how far have they advanced human knowledge? The question of *limitation* to science is important; because an immense amount of genius, labor, and time has been utterly wasted on what is *impossible*. Take one signal instance of this in Perpetual Motion. This is a mere idea—practically an impossibility; yet, on it have been wasted the genius, thought and labor of thousands, who, had they turned their attention to other things, might have made great advances in knowledge. Take another in *Squaring the Circle*—a positive impossibility; yet, men have gone on employing time, and thought enough to have founded and built up an empire, in attempting to square the circle, and convince mankind that they had discovered what all others had failed in.

The *limitation* of human knowledge is, therefore, a fact important to know. The vanity of man is great, and it often leads him into wonderful mistakes. The whole range of human knowledge is confined to the two great departments of Matter and Mind; yet, in the greatest of these—Mind—man has made no *discoveries* whatever. All that is known lies in consciousness, and the first man had as full knowledge of the faculties and nature of mind, as the last. Mr. Lewes, in the last paragraph of his Biography says, that the very *first problem* in Metaphysical Philosophy remains unsolved to this day! In other words, Philosophy has done nothing; we mean metaphysical philosophy. All the philosophers in the world have not discovered the letter A. in the alphabet of metaphysical philosophy. Here, then, we have a *limitation* at once, to human discovery. We can *discover* nothing in the metaphysical world, beyond our own mind. All that we know beyond this is Religious Truth, *revealed* to us in the mercy of God. Hence we have, an idea of immortality; it has been *revealed* to us.

Thus, when we would begin scientific discovery and carry it on in the world, we have first to confine it to the department of matter. But, what can we do in the department of matter? The simple answer is, that we can discover (that is, *recognize*) facts, and then *systematize* them by *generalizations*. This is all that science has done, since the world began. It is all that is possible; and it is very curious to observe how exactly, gradu-

ally, and in order, scientific discovery has followed this process. The first thing, undoubtedly, that an intelligent man, without any of our present scientific knowledge, would observe, and, therefore, *discover*—recognize—would be the *surface and form* of things; then the *appearance and movements* of the heavenly bodies; and then *numbers*, which is nothing but the *repetition* of these appearances. Thus Geometry, Astronomy, and Arithmetic, must necessarily have been the first sciences, and for many ages of the world—indeed, till the beginning of modern times—they were the only ones of any importance. The analytical part of Mathematics is the *invention* (not properly a discovery) of modern times; for all of Algebra, the Calculus, and the analytical branches of Mathematics, are mere generalization of Arithmetic and Geometry. The former are the mere machinery of the latter, which are founded in nature. Of course, while there was no real science in the world, but Geometry and Arithmetic, there could be no practical arts, no grand machinery of practical life, beyond what Geometry and Arithmetic would produce; and there was none. Great buildings and monuments, canals, rude vessels, the ancients had; but nothing important beyond. All the refined sciences and arts were wanting. The art of conquering space and time; of re-compounding the elements of nature; of new motive powers; of diffusing light; of transmitting intelligence, without the aid of persons or animals; in fine, all which creates the vast power and development of society was utterly unknown to the ancients; unknown till within a century or two past. Why? Because, being occupied for a long while with discoveries *on the surface* of things, they had not looked *under* it. That was all. When scientific men had become perfectly familiar with the *surface, form and enumeration* of things, their curiosity sought something more, and they began to look *under* the surface, and recognize the *elements* of things. This was a far higher and more important office. It was like one who first discovered a peach, and who noted its colors accurately, and measured its circumference, and ascertained its weight, and turning to the tree, enumerated the peaches on it, and observed how they were clustered on the tree. When he had done all this, he would want to know what was the use of the peach, and he would break it open, and then taste, and finally discover its great and ultimate property of nutritive food for man. Thus, when men had learned Geometry, Arithmetic, and apparent Astronomy (for Mechanical Astronomy they did not, and could not then know), they began to look at the *elements* of things. This was begun in the time of the Greeks, who began to learn something of the elements—*air and water*; and something of the hydraulic and pneumatic machinery, which spring from that

kind of knowledge. But, after all little was done till within the last century comparatively.

The *beginning* of Chemistry must have been made prior to the invention of gunpowder; but, Chemistry itself is the creation of the last hundred years. What was Chemistry in 1758? Since then the discoveries of Black, Gray, Lapac, Lavorini, Davy, and Dalton, have really made that science.

Mechanical Philosophy and Scientific Astronomy were a little earlier, in the discoveries of Kepler and Newton; but the great practical progress of science is recent—very recent. It consists in two things; the discovery of the *elements* of the Natural world, and the *application* of them to the Arts of Life. Chemistry, Natural Philosophy, Mechanics gave the world the command of the elements which were necessary to make new *combinations*, and then new *machinery*. Then arose Gunpowder, Steam, Electro-Magnetism, and a thousand other minor results of the great advance in Physical Philosophy.

The progress of scientific discovery teaches one thing, which is full of hope and glory for the earth. It is, that the advance of science and the consequent *practical* improvement of mankind, is in *geometrical proposition*. It does not advance by units, but doubles as it goes. If the improvement of this age be so astonishing, what must that of the next be? What a new world of elements, images of beauty, bright flashes of light, emanations of ineffable splendor will burst upon the eyes of future generations! Even in the mere physical of this earth, how much remains to be known! And when it is known, (as soon it must be,) with what dazzling glory, will the then illuminated eyes of men be filled!

✂ The yearly meeting of the Michigan Central Company was held at Detroit on Monday last, when the annual report of the management was presented. Some of the figures compare with 1857 as follows:

	1858	1857.
Gross Income.....	\$2,422,758	\$3,114,602
Expenses.....	1,531,218	2,083,199
Net Income.....	\$897,540	\$1,021,403
	June, 1858.	October '57.
Capital.....	\$6,058,000	\$6,058,000
Funded debt.....	8,242,000	5,764,000
Floating debt.....	118,000	1,790,000
Total.....	\$14,418,000	\$13,612,000

The discount on the new loan, soon after the crisis, accounts, of course, for a large share of this difference.

ILLINOIS CENTRAL.—The Illinois Central R. Co., announces its readiness to pay twenty per cent on account of the indebtedness, upon which it suspended last winter.

✂ The receipts of the Illinois Central Railroad in June were \$155,000. The cash receipts of the Land Office in that month were \$63,643 48, and \$51,000 in bonds were cancelled. The entire amount which has been cancelled is \$791,000.

Southern Pacific R. R.

We have received a pamphlet containing a number of articles relative to the actions of official parties concerned in this enterprise, and ordered to be published at a meeting of the Stockholders of the Company, held in the city of New Orleans, June 8, 1858. Some of the documents contained in the pamphlet we have heretofore published, hence we give only those we deem of interest.

We have but one remark to make, and that is relative to the notice to stockholders to pay up their installments. We deem this rather premature, and as smacking strongly of the conduct of Mr. Yerger and his associates. The fact is, that it is impossible for parties not behind the curtain to tell what to do, they do not wish to loose the money they have already invested, neither do they desire to throw away other money upon that which they have been forced to look upon, to say the least, as of but doubtful value. It is certainly yet a matter of considerable doubt as to which Company is, or is going to be, the owners of the road, and it is scarcely giving *innocent* (and many, probably, *ignorant* from not having received sufficient notice) parties a fair shake to sell their stock until this question of ownership is determined by the courts. It also seems to us that this course will be productive of interminable law suits. Besides, has not most of this unpaid stock been sold already?

TO THE STOCKHOLDERS OF THE SOUTHERN PACIFIC RAILROAD COMPANY.

I deem it my duty to attempt to impart to the stockholders of this company such information as I have acquired and possess relative to the affairs of the company; and although the statements I may make may reflect upon the action of the President and some of the officers and agents of the company and some of the directors in Texas, yet a sense of duty to myself and a determination to act rightly and protect the interests of the stockholders, as far as in my power, impel me to submit the following statement without further preface.

In the month of August or September, 1857, the executive committee in the city of New York, being informed by the President of the company that it was necessary to raise \$50,000 in cash, in order to finish the twenty miles of road and save the charter, did make arrangements to raise said sum, and the party agreeing to furnish the said sum proceeded from New York to New Orleans, via Memphis, Tenn., expecting to furnish the amount in cash as required. On arriving at Memphis, they found in the public papers a notice of the fact that a trust deed had been created, in which any one creditor named therein could notify any one trustee out of those named that the whole road and all its property could be sold at a notice of only ten days, given in the city of Marshall, Texas, to pay off the debts secured. It need hardly be remarked that a trust deed empowering any one of the trustees to sell out the road and at such short notice, and in such a manner as to utterly prevent the stockholders being informed when their property was to be sold, had the effect of breaking up the arrangement for the \$50,-

000 raised by the committee, and utterly destroying the credit of the company. It appears by the records of the company that in October last, the Directors, at a meeting in New Orleans, authorised the creation of a trust by the President, in order to raise \$30,000 to enable the company to complete twenty miles of the road, which the charter required to be furnished by the 16th of February, 1858. The President was also authorized to secure Messrs. J. T. Grant & Co., contractors, the amount due them for work done on the road. The President of the company proceeded to Texas and executed a deed of trust, not only for the purposes mentioned above, but to secure his own salary and other and all debts due by the company, classifying these debts in such a manner as he thought proper. Geo. S. Yerger, in the month of April, 1857, in the city of New Orleans, headed a subscription list to the stock of this company, as follows: "George S. Yerger, for himself and friends, \$30,000." Mr. Yerger, on the eve of his departure for New Orleans for a temporary purpose, while subscriptions were being made by citizens of New Orleans, was requested by me to pay before he left at least a portion of his subscription, as A. C. Bullitt had paid me \$10,000 in cash, and other stockholders were also paying up. He at once consented, and gave me a draft on his factors, Messrs. Bogart, Foley & Avery, for \$5,000. I gave this draft next morning to Messrs. Sam. Smith & Co., with whom I had opened an account. The day after I had done this, I received a letter from Mr. Yerger, dated "on board steamer," in which he requested me not to use the draft, as he had determined to take all his salary except \$1,500 traveling expenses in stock. The next day Messrs. Sam. Smith & Co. returned me the draft, saying that Messrs. Bogart, Foley & Avery would not accept it, and that a letter from Mr. Yerger would explain all. I received a second letter from Mr. Yerger next day, in which he expressly declared he would take all his salary in stock. Yet, notwithstanding this promise and agreement, we find in the trust deed that he secures himself for salary due and to become due, the sum of \$7,500. On the return of Mr. Yerger from Texas, the making of the trust deed for the purpose of raising the \$30,000 and securing Grant & Co., and also the settlement of an account with Lewis T. Wigfall, M. J. Hall, W. T. Scott and others, was confirmed. But, as I am informed, the other portions of the trust deed were never intended to be confirmed by their own direct act or vote by either of the following gentlemen, who composed a portion of the directory, viz: R. T. Archer, A. M. Holbrook, C. S. Todd, J. J. Person, T. Butler King, nor myself. In the month of December, 1857, a law was passed by the Legislature of Texas, which bore upon its face the appearance of being framed expressly to meet the case and position of our own road, one of its provisions being that when a sale of any railroad should be made by virtue of any trust deed which had been created, that the parties purchasing should possess all the rights and privileges and franchises of the original corporators, on their—the purchasers—complying with the requirements of the charter. In the month of December, 1857, Mr. Yerger informed me that he had assisted in drawing up or framing that law; that the object of it was to sell out the company, and thus get rid of a large amount of stock which he, in common with a majority of people at the South and in Texas, believed to have been fraudulently issued from the

New York office; at the same time frankly avowing that it was his determination, and that he had made arrangements to that effect, viz., to admit all stockholders, such as he termed *bona fide* stockholders, into a new company, when formed after a sale took place. It will be remembered by you that a full investigation was made last December, at my earnest solicitation, into all the charges made against the New York office, and that a report was made and widely spread among the stockholders and the public, signed by the President, "by order of the board," declaring it to be the unanimous opinion of said board, that "no fraud had been committed," etc., etc. This report declared that the amount necessary to pay off the deed of trust had been provided for by arrangements then made, in the form of a contract between the company and Dr. J. Fowlkes. It was hoped and believed that the debts of the company would be paid and provided for in such a manner as to cancel the deed of trust. The nature of this contract, dated 23d December, 1857, was as follows: Dr. J. Fowlkes agreed and contracted to pay the sum of \$50,000 to the creditors of the company in Texas before the 1st day of April, 1858, and the further sum of \$300,000 within twelve months from that date. The amount of \$350,000 was stated at that time to comprise all the liabilities of the company as then known to exist. Said Fowlkes also agreed and contracted to pay J. T. Grant & Co. any sums of money which might be due or become due on the finishing of the road to Marshall, sixty days after its completion to that point; and further, to provide the payment to Messrs. Grant & Co. of the sum of \$12,600 monthly, which amount was to be paid to them according to the terms of a contract made between them and the company for constructing seventy miles of the road. The company, on their part, agreed that "no liens should be created or remain on the property of the company," except to secure J. T. Grant & Co. and the Texas debt of \$50,000 before mentioned and to secure the State loan.

They (the company) further agreed to furnish short credits to the amount of \$100,000, and to deliver \$400,000 of the construction bonds of the company within ten days.

They further agreed that all the installments or assessments on stock then due or to become due on the 1st of January were to be placed under the control of Dr. J. Fowlkes, to be applied towards the payment of the liabilities of the company. The company did not remove the liens from the property as they had contracted to do. I am fully satisfied and believe that the said Dr. Fowlkes could and would have readily complied with his portion of the contract, had the company enabled him to do so by removing all liens upon the road, etc. There are so many facts connected with these relations between the company and said Fowlkes that I have requested him to state them to the stockholders; and in compliance with my wishes, Dr. Fowlkes has prepared a communication for the stockholders, which I have no hesitation in saying is entirely correct; and I do not think that the slightest censure is due to him for the unfortunate position in which we find ourselves placed.

On the 29th day of March, 1858, two of the trustees, viz., John K. Yerger and William Bradfield, addressed a letter to George S. Yerger, President, in which they expressly declared that they would not advertise the road until they gave him notice, and that

they would not sell at public sale without giving sixty days notice; and yet, notwithstanding this express promise, Mr. John K. Yerger, one of the trustees, did advertise the road to be sold, giving only twenty days notice. Benj. Long, another one of the trustees, also gave same notice.

At the same time that letter was addressed to G. S. Yerger, he handed it over to Dr. J. Fowlkes, informing him at the same time in writing, that \$35,000 was all that was necessary to be raised within sixty days from that date for the satisfaction of the creditors of Texas; and yet, notwithstanding this declaration, we find the road advertised and sold on the 1st of June. On the 15th day of May last, I left New York for New Orleans, via Memphis. On meeting Dr. Fowlkes there, he showed me a machine copy of a letter to Geo. S. Yerger, President, and G. C. Lawrason, Secretary, dated about May 1st, stating that he had \$28,000 then in hand, adding that the balance of the money would be provided in the month of May. He also showed me a telegraphic despatch from the office in New Orleans, that \$100,000 was necessary to be paid, which was received on or about the 12th of May. He also showed me another telegraphic despatch, of a later date, saying that all the debts must be paid except Mr. Yerger's salary. This last despatch was from the Secretary of the company, and dated 19th May.

Dr. Fowlkes and myself proceeded as rapidly as possible to Marshall. We found, on our arrival there, apparently a fixed and immovable determination to sell out the road, &c., on the part of the Texas directors, and Mr. Lewis T. Wigfall, the attorney of the company, under salary, a member of the State Senate of Texas and a beneficiary in the trust deed, frankly avowed that the trust deed was made by Mr. Yerger for the express purpose of selling out the company—that Mr. Yerger assisted him in framing the law passed in 1857, which I have before alluded to, and added that that law was framed for consummating the purposes for which the trust deed was conceived and executed. Finding all hopes of arrangement or compromise fruitless, we applied to Mr. Benjamin Long, co-trustee of J. K. Yerger and Wm. Bradfield, showing him the joint letter of J. K. Yerger and Wm. Bradfield, promising not to sell without notice to the President, and not then until after sixty days public advertisement. We suggested to Mr. Long the propriety of postponing the sale for sixty days. Mr. Long replied that he was very sorry that he had any thing to do with it; and that he was induced to act, believing from the representations made to him that it would be a mere matter of form; subsequently it was represented to him that the charter was in danger of being lost. If the domicile of the company was not removed to Marshall by the 19th of June, and a majority of the directors, residents of Texas, chosen in compliance with the requirements of the law of December 19, 1857, it was declared that no election could or would take place in New Orleans. That Mr. Geo. S. Yerger, the President, had left that city. That Mr. Lawrason, the Secretary, would be in Texas, and the Company was considered as disbanded or dissolved. All these reports created in the minds of the people in Texas a strong prejudice against us and the Company. The road was sold on the 1st of June for \$40,000, being bought by Dr. Sanders of Marshall. When the terms of sale were given out, the auctioneer said the

terms of sale were "cash within thirty minutes." These terms were, no doubt, proclaimed to prevent the possibility of other parties bidding outside of those intended. Whether or not these terms were complied with will appear by the acknowledgment of the aforesaid Mr. Long, made some eighteen hours afterwards, that he had not received the \$40,000 in cash, but that he had received a satisfactory bond of indemnity from Messrs. Scott, Hall and others, to hold him harmless for any measures he might adopt as trustee. Mr. Long was next day chosen director of the new company which the purchaser and his associates were endeavoring to form out of what they considered the ruin of our company. I regret to add that George C. Lawrason, Secretary of this company, was also in Texas co-operating with those parties who had accomplished their purpose of selling our road, and that said George C. Lawrason was also elected a director in the new company now attempted to be formed. Messrs. L. T. Wigfall, W. T. Scott, M. J. Hall and others had a claim for stock which had been agreed upon to be issued to them in payment of a charter which they had sold the company. I am informed that after the trust deed had been executed by the President, that it was perceived by the gentlemen above mentioned that the selling out of the company would also sell out their interest as stockholders. To remedy this difficulty, the trust deed was recalled from the office in which it had been deposited for record, and the stock claim was converted by Mr. Yerger into a mortgaged debt, and that mortgaged debt secured in the trust deed—securing them a priority to such creditors whose money and credit had graded the first ten miles of road, and purchased chairs, spikes, etc., for the completion of the first twenty miles of the road.

Being advised by counsel that it was thought that the deed of trust was void for want of authority to make it, and that it was also fraudulent both in law and in fact; an application was made for an injunction to prevent the sale; this application was refused, not upon the ground, as I am informed, that the deed of trust was valid, but upon the assumption that it was void, and that the purchaser could acquire no title under it, and that, therefore, the corporation could not be prejudiced by any sale under said trust.

Subsequent to the sale, an application was made to enjoin the purchaser and his associates from taking possession of the property, or in any wise interfering with the same. This injunction was granted until the 19th instant, without security; and to be continued, on condition that the company give bond and security in the sum of \$500,000, conditioned to prosecute their suit with effect, or in case of failure, to pay all costs and damages for wrongfully suing out said injunction; subject to such modification or further order as the Judge may deem proper to make in the premises.

From this action of the Judge, I think it is clear that he regards both the deed and the sale as void; otherwise he had no right to prevent the purchasers from taking possession of the property claimed to be purchased.

Our company was never in so favorable a condition as at present, setting aside the difficulties growing out of this unfortunate trust deed. While at Marshall, I ascertained that the road could be finished five miles, on its way to Marshall, at an expense not exceeding \$5,000. The company would then come into immediate possession of 256,000 acres of land

which have been located and surveyed. If we value these lands at \$2 00 per acre only, the proceeds would be \$512,000, which would more than discharge any debt of the company after the road is finished to Marshall. The company would then have the road unincumbered—a road which would more than support itself; and they would have other assets to the amount of over \$400,000, viz: 380,000 of notes secured by bonds and mortgages, other lands in Texas, etc., etc.

In conclusion of this report, I beg leave to submit, that the stockholders should resist with unanimity the effort to deprive them of their property and rights, by this most unusual proceeding; and I would strictly recommend the literal compliance with the requirements of the law of Texas, passed 19th December, 1857; and I would recommend them to take such further measures as the exigencies of the case may require.

EDWIN POST, Vice President.

New Orleans, June 8, 1858.

PREAMBLE AND RESOLUTIONS.

WHEREAS, On the 19th day of October, A. D. 1857, George S. Yerger, Esq., acting as President of this Company, executed a deed of trust of all its property and franchises, without the sanction and authority of the Stockholders therein: AND WHEREAS, also, the Stockholders, under the concurrent advice of eminent counsel believe said deed is utterly void, that it is fraudulent in law and in fact, and made with the design of selling out the franchise and estate of the Company to a select few to the great prejudice and injury of the large mass of the Stockholders: AND WHEREAS, as Stockholders, we will not permit any act of our officers, done intentionally or by error of judgment, to work injury to others or to ourselves: Be it therefore,

Resolved, That the "Deed of Trust," purporting to have been made by George S. Yerger, Esq., acting as President of this Company, on the nineteenth day of October, A. D. 1857, be and the same is hereby declared by us void and of no effect; that we will not recognize any validity thereof, but, on the contrary, condemn the same as working a fraud in law and in result upon the rights of the Stockholders.

Resolved, That the resources of the Company are most ample fully to pay and secure to every bona fide creditor thereof, every dollar that may be justly due; and we request and direct that the President and Directors will make prompt provision for the satisfactory payment and adjustment of all liabilities of the Company.

Resolved, That the sudden abandonment of the Company on the eve of the annual meeting, and of a sale, advertised under the aforesaid "Deed of Trust," by George S. Yerger, Esq., acting as President, and Geo. C. Lawrason, Secretary, without presenting to the Company any statement of its condition, any exhibition of a balance sheet, nor accounting for what monies, if any, may be on hand—as also, their known affiliation with those whose every effort was to force on said sale to their own benefit—merits the severest censure, not only from this Company, but from every right-minded and honorable man.

AND WHEREAS, ALSO, This Company is greatly indebted to the munificence of the State of Texas for its patriotic grants of land and loans of money, more than enough to complete the road, and even to invite the co-operation of capitalists—to induce immigration of useful citizens within its borders—to encourage thereby agriculture and mechanic arts—and to afford at the same time not only a secure but a profitable investment to all connected with it—enabling the South to contain within its limits the great future thoroughfare of the commerce of the world: AND WHEREAS, ALSO, after all this generosity, the State of Texas, by a general enactment, has expressed the will of the people of that State, that this and other offices of a similar nature be established within that State on or before the 19th of June, A. D. 1858: Therefore, be it further

Resolved, That, in accordance with the present law of Texas, the Office of this Company be forthwith removed to the city of Marshall, Harrison county, Texas; and that the proper officers of the Company carry the same into effect immediately.

Be it further

Resolved, That the Mortgage and Trust Deed, dated January 1st, 1853, executed by George S. Yerger, Esq., acting as President, and by the Directors of the Company, to secure the payment of the principal and interest of the Construction Bonds of the Company heretofore issued by this Company, be, and the same are hereby ratified, acknowledged and confirmed.

The above preamble and resolutions were UNANIMOUSLY adopted.

SOUTHERN PACIFIC RAILROAD.

NEW ORLEANS, June 8, 1858.

At a meeting of the Stockholders of the Southern Pacific Railroad Company, held this day, the following Directors were chosen for the ensuing year:

R. T. Archer, Mississippi; Edwin Post, New York; A. M. Holbrook, New Orleans; J. S. Deas, Alabama; A. L. Shotwell, Kentucky; Jephtha Fowlkes, Tennessee; Jeremiah Morton, Virginia; T. Butler King, Georgia; C. S. Todd, Thomas B. Lincoln, R. H. Russell, D. C. Wilder, R. T. Posey, T. H. Shugart, Granville Lewis, Wm. H. Street, Thomas H. Wiley, William Wommack, Josiah D. Perry, Texas.

And at a subsequent meeting of Directors, the following officers were chosen:

J. FOWLKES, President, Tennessee.
C. S. TODD, Vice President, Texas.
D. C. WILDER, Secretary, Texas.
THOMAS H. WILEY, Superintendent and Treasurer, Texas.

EDWIN POST, Assistant Vice President, New York.
R. M. STRATTON, Assistant Secretary, New York.
JEPHTHA FOWLKES, President.
D. C. WILDER, Secretary.

Immediately after the election, the President, Vice President, Secretary, Treasurer and Superintendent of the Road, proceeded to Marshall, Texas, thereby complying with the law of Texas, passed December 19th, 1857.

NEW YORK, June 25, 1858.

The Stockholders are hereby notified, that the installments falling due on the 1st July next, can be paid either at the office in Marshall, Texas, or at the Transfer Office, No. 54 Wall Street, Room No. 6, New York; and all Stock on which the installments remain unpaid on the 1st August next, will be liable to be sold, pursuant to the sixth Article of the Charter of the Company.

EDWIN POST, Asst. Vice Pres't.

LETTER FROM JEPHTHA FOWLKES.

The newly elected President of the Southern Pacific Railroad has issued a circular to the stockholders, in which he sets forth the course which they design to pursue. We are rather disposed to think that the parties concerned in the late sale were too smart for themselves, and have been caught, in their own traps. This is as it should be; when a set of men go deliberately to work and plan such a stupendous piece of villainy as that attempted by this "deed of trust" enterprise, they should not boast of it, and count over the amount of their contemplated gains in public, for by so doing, they not only exhibit to the world's admiration their *smartness*, but also their weak points. Such is evidently the case in the present instance, and we trust that all who have had a hand in it, will meet with that contempt that such conduct so richly merits from honest men.

The sympathies of stockholders must necessarily go with Mr. Fowlkes and his associates, and although they will, no doubt, meet with many embarrassing circumstances, yet, should they succeed in getting the full control of the road and its franchises, and conduct the affairs of the company with ability and integrity, they will deserve, and no doubt receive not only great pecuniary benefit, but that rich reward of public praise, that noble deeds justly merit.

Below is the closing paragraph of Mr. Fowlkes' letter:

I shall be able, I doubt not, to protect, by litigation or otherwise, the great interests of the Company, and of the stockholders of this company; and at all times, and under all circumstances, I shall be able to fully vindicate myself, personally and officially, against the assaults of falsehood and slander, of misconception and misrepresentation, by the true state of facts plainly narrated; which shall not admit of cavil or denial! I hope all others may be able to do likewise! The trust sale, I am advised and believe, to be UTTERLY void, and the adverse claim, set up by the purchas-

ers, entirely and absolutely, "a nut without a kernel." I have no comment to offer at present upon the violation of the *mandate* of the Hon. Judge, restraining until the 19th all interference with the property, &c., of the Company, by these purchasers under the trust deed in assuming, by them, to take possession of the property of the Company. That is a matter between themselves and the constituted tribunals of the State.

As soon as practicable, I will present to the proper authorities of the State of Texas, and the public, a full statement of the condition of the Company, showing the whole amount of stock issued; the full sum of the pecuniary liabilities of the company, together with the assets and resources of the company, from which it will be seen that the Company is abundantly able to pay all creditors and construct the road, as demanded by the policy of Texas, under its present legislation.

Since the above was in type, we have received the following, which would indicate that the Texas Courts are disposed to sustain the Trust Deed, and the action of parties under it.

[From the New Orleans Picayune of the 7th.]

We see it announced in the Caddo Gazette of the 3d inst., that the District Court of Marshall has sustained the deed of trust under which the Pacific Railroad was sold on the 1st of June.

The case is to be carried up to the Supreme Court of the State for a final adjudication.

In the meantime, we are at a loss to understand in whose possession the road and franchises will be during the pendency of these proceedings at law; although there can be no doubt as to the main fact, that all progress in the work will be suspended, and the great enterprise languish.

The case before the court in Marshall, as we understand it, was as follows:

After the sale, under the trust deed, the representatives of the Company obtained a writ of injunction with a view to try in the Texas courts the validity of the sale, and to test the applicability, to this corporation, of penalties created by statute after their rights were vested. Pending the conflict at law, the possession of the road was a great point to be gained by either party; whether it should remain with the injured stockholders until the lawfulness of the decree of dispossession should be decided on, or should pass at once to the claimants under the contested sale. We are not apprised of the acts by which the transfer was made, but we find, by the report of the present proceedings, that the old Company has been dispossessed by the new, and instituted steps to recover possession.

Messrs. Wigfall, Scott and Sanders, of the new company, were arrested for contempt of court, on the oath of Messrs. Fowlkes and Post, for the old stockholders, for having violated the injunction and taken possession of the road. While this trial was going on, the Judge, (Frazer) acting without petition or oath from any party, but on his own view of the testimony in court, ordered Mr. Fowlkes into custody on the same charge of attempting to get possession. How it could be that both parties are liable to arrest for seeking possession of a property to which they are the opposing and the only claimants, does not appear in the report that has reached us.

The June earnings of Galena Road exceed somewhat \$200,000.

RAILROAD TO OMRO.—The *Omro Republican* of June 24th, contains the following item:

PERSONAL.—Our sanctum was favored yesterday, with a visit from Mr. E. Miller, of the firm of Miller & Starr, Milwaukee, who informed us that the whole amount of iron for the completion of the Ripon & Wolf River R. R. through to this place, is purchased, and part of the same is already on the way here, and it is expected that the road will be completed to this point by the 1st of August.

The completion of this link will bring another of the thriving and attractive villages, in Northern Wisconsin, into direct communication with Milwaukee.

IMPORTANT DECISION.

A CASE AFFECTING THE OHIO AND MISSISSIPPI RAILROAD COMPANY.

(From the St. Louis Republican, July 1.)

Judge O'Melveny, of the Second Judicial Circuit of Illinois, has recently rendered a decision in Chancery, affecting the interests of the Ohio and Mississippi Railroad Company, which we publish below.

Judgment was rendered against this Company in August last in the Circuit Court of Marion county, and upon the issue of execution, property of the Company was levied upon and advertised for sale. The Trustees for the Bondholders claimed this property as part and parcel of the real and personal property conveyed to them by the various mortgages, as security for the payment of principal and interest of several millions of dollars, and made application to Judge O'Melveny in Chambers, for an injunction, restraining the Sheriff of Marion county from proceeding to sell the property. The Court, it will be perceived, has decided the following points:

1st. That the mortgagors have an interest in the property, subject to sale or execution.

2d. That purchasers of this interest buy it charged with previous incumbrances, the mortgagees losing none of their rights and suffering no detriment to their security. Their lien upon the mortgaged estate is as valid, while in the possession of the purchaser, as it was before, and a court of equity would interpose to restrain the purchaser from wasting or injuring the security. It is for the purchaser at Sheriff's sale, to decide whether the interest of the company in the property sold is worth anything.

3d. The mortgages, so far as they convey the personality, are fraudulent and void as to creditors, by the statute of 1845, respecting chattel mortgages, which limits the duration of such instruments to a period of two years.

4th. The rolling stock is not personality, but a part of the realty.

5th. Railroad realty is not inseparable, but may be divided and sold in parcels.

Upon a consideration of the whole case, the complainants' motion for an injunction was denied, and the bill dismissed.

We learn that an appeal has been taken, or will be, to the Supreme Court.

In the Marion County Circuit Court, Second Judicial Circuit, Illinois.

Marshall O. Roberts, et al., vs. William T. Eastland, Sheriff, et al. Bill in Chancery, and motion for injunction, &c.

The complainants in this suit, being the Trustees of the Bondholders of the Ohio and Mississippi Railroad Company, and representing the mortgage liabilities of that Company, to the amount of seven million seven hundred and fifty thousand dollars, pray a perpetual injunction restraining the Sheriff of Marion county, from proceeding to sell certain property, taken in execution as the property of that Company.

The complainants exhibit with this bill, four several mortgage deeds of trust, duly executed by the Ohio and Mississippi Railroad Com-

pany, and recorded in the respective counties through which the railroad of the company passes, prior to the rendition of the judgment against the said company, under which the sheriff now proceeds to act.

By the deeds of trust the Ohio and Mississippi Railroad Company, convey to complainants by way of mortgage, (each mortgage having the prior lien, according to its date) the franchise, and the entire property of the Company, real, personal and mixed, together with the tolls and revenues of the Railroad, which the Company owned, at the respective dates of the mortgages, or which the Company should at any time thereafter acquire. It is provided in these mortgages that they may be forfeited on the part of the Company by the non-payment of the interest as stipulated, otherwise upon the punctual payment of the interest on the bonds, that do not mature until 1872, 1874, 1878 and 1880, and until forfeiture the mortgages remain in possession.

The validity of the judgment and execution, as against the Railroad Company, and under which the Sheriff has proceeded to act, is not disputed; and by virtue of that execution the Sheriff has levied upon the following property in the possession of the mortgagors, and as their property, to wit: "Sixty cords of wood, one passenger car, the right of way, being one hundred feet wide, track and road bed, of the Ohio and Mississippi Railroad, thirteen and a half miles in Marion county."

Upon the argument of this motion, the complainants' solicitor, W. Homes, Esq., has presented numerous points, and argued them with marked research, earnestness and perspicuity, but on principles of sound judicial procedure this court should pass upon nothing extrajudicial, and should pass only upon those questions presented in the record necessary to a full decision.

The first question presented is, *have the mortgagors an interest in the real estate mortgaged, subject to sale on execution issued on a judgment rendered subsequent to the recording of the mortgage.*

At common law, the legal estate by the grant in the mortgage was vested in the mortgagee, if the debtor "has mortgaged his land in fee he has no interest remaining," (Adams' Eq. 111,) but now it is well settled in this country, both at law and in equity, that a mortgage is a mere security for money. (2 Cow. 195.) That the mortgagor in possession is treated as the real owner of the land, (4 Scam. Rep., 82 and 83,) and the interest of the mortgagor, being the possession, use, equity of redemption and entire estate, *subject to the debt of the mortgagee as a charge upon the realty*, is subject to be sold on execution. (See Statutes of Illinois, pages 603, 604, sec. 1.)

Whether the lands be sold voluntarily by the mortgagor, or by virtue of a *fi. fa.* against his goods and chattels, &c., the sale in no degree prejudices the mortgagee. He has precisely the same rights, and his lien upon the estate mortgaged is in every respect as valid, in the possession of the purchaser as it was while the estate was in the possession of the mortgagors, and a Court of equity would as promptly interpose to restrain waste, or injury of the security, in the hands of the purchaser, as in the hands of the mortgagor.

The deeds of trust, each embracing, or purporting to embrace the entire corporate property of the company, indicate that the parties recognize an interest, subsequent to the other, or rather an estate of greater value than that already pledged, the subject matter of security, and who can say but that a purchaser of the mortgaged estate, at Sheriff's sale, may obtain an interest of value, to satisfy the judgment. This is a question for such purchaser to decide.

A purchaser succeeding to the estate of the

mortgagor, may pay off the incumbrance, and vest the whole property and right of uninterrupted possession in himself, or if default be made in the payment of the mortgage debt, so far as the lands mortgaged are concerned, he is a mortgagor in equity, and the legal title and entire estate may be sold, and the funds arising from the sale will be applied to that debt, regardless of his purchase.

In these mortgage deeds of trust (and in this respect all are substantially alike,) the Ohio and Mississippi Railroad Company, after granting the real estate, franchise, and fixtures, also convey "All iron rails, timber, tools, and personal property whatsoever, and all tolls, incomes, revenues, issues and profits of the property conveyed, together with all such property as the said company should after the date of the respective mortgages acquire."

On the part of complainants it is insisted, that under the 16th section of their charter, such mortgage of personal property is valid, although the property is not accurately identified by description, and the duration of the possession with the mortgagor is in conflict with the law of March 3, 1845, and notwithstanding it is sought to make these mortgages cover all the property which the Company may acquire after their date.

Whether this is so or not is the next question presented. The chattel mortgage act of 1845—see statutes of Illinois, p. 813—provides for the retention of the property by the mortgagor for not exceeding *two years*; and since its enactment, no mortgage of personality has been regarded as valid, unless in conformity with that act. I readily admit its application to railroad companies is attended with embarrassment, but these corporations being regarded in law a *mere person*, they must be governed and subject to the same laws which apply to every other member of society as it respects their contracts. The power in the 16th section of the charter of the Ohio and Mississippi Railroad Company, to borrow money and mortgage their corporate property, is to be exercised consistent with the laws of the State. The law and the freedom of trade are alike opposed to the tying up property for a long period of years, and it would be injudicious to concede to a corporation under the simple power to mortgage, the unlimited power to exclude their personal property from creditors under the form of a mortgage for an unlimited period, and from which other persons possessing the like power to mortgage, are by law prohibited. The character of these deeds of trust show that, so far as the personality *in specie* is concerned, they do not rely upon that as a security, only so far as it will be the means of enabling the mortgagor to pay the mortgage debt, by the profits accruing from its use.

The right of the mortgagors to use this material in the operating a line of railway, of necessity gives the power daily to consume and extinguish this property. The wood, oil, and all that variety of material of the character of personal property used in operating a railroad, is in itself, no security, as it is hourly the object of the most complete consumption and destruction. That upon forfeiture as between the parties to the deeds, the mortgagees would succeed to all the personality then *in esse*; the mortgagors by the deed being estopped from denying its obligation, is, in my opinion, the legal effect of these instruments; and that as to all the personal property acquired after the date of these mortgages, the O. & M. R. R. Co., as to third persons and subsequent creditors, are to be deemed the absolute owners. The possession, and in their business the right to dispose of the same, is complete. To that extent, therefore, they are fraudulent and void as to creditors. See 3, Gil. Rep. 455; 10 Met. 481; 21 Maine Rep. 96; 2 Cush. 294. 7 Cush. 471 and 1 Parsons on Contracts, 454; 4 Metcalf, 306.

The levy upon railroad passenger cars incidentally raises the question, and it is pressed upon this Court to decide, whether it is a fixture or mere personal property. In the law regulating property, few subjects present a greater contrariety and perplexity of decisions than that of fixtures. Distinctions are made in the applications of the principles of law upon this subject, as they may arise between the vendee and vendor, mortgagee and mortgagor, landlord and tenant, heir and executor.

To this question I have given the most careful consideration; and in view of the progress and interests of society, the interest of all creditors of railroad companies, I am of opinion that a railroad car, while on the road, is a fixture, and passes with a conveyance of a railroad and its appurtenances. Without discussing the question here, I refer to 2 Watts and Sergeant, Rep. 116 and 390; Farmers' Loan and Trust Company et al. vs. Hendrickson, recently decided in New York, by Judge Strong.

Complainants deny that railroad realty is the subject of levy and sale in parcels, in other words, they aver that a railroad is an "entirety."

Although, *in fact*, it may be for some purposes regarded an entirety, and indivisible, yet, in law, for great reasons of public necessity, it must be held to be separable.

Under our laws, the Sheriff's writ commands him to levy of the goods, chattles, lands and tenement of defendant, "to be found in his county," for the debt, and no personality is to be taken until the real estate is first disposed of. Now, if the real estate, "in the county," and over which only the Sheriff has authority, is not disposed of, and the subject of levy and sale, the result would be that no execution could be satisfied out of the defendant's property, because it is manifest that in the county there is real estate, and no levy upon the personal property is warranted until resort is first had to the real estate. Upon the whole case, I am of opinion the motion for injunction should be denied, and the bill of complainants dismissed, &c., &c.

PREVENTION OF EXPLOSION OF STEAM BOILERS.

TO THE BOARDS OF TRADE OF THE CITIES OF PITTSBURGH, CINCINNATI, LOUISVILLE, ST. LOUIS, AND NEW ORLEANS.

By the late explosion of the steamboat Pennsylvania, one hundred lives have been sacrificed. Is this sad catastrophe to pass away again without an inquiry, without an effort to prevent recurrences in the future? Is it not time yet to ascertain what can be done and what should be done?

Can explosions be prevented at all, and by what means?

No country has so great an interest in this question as the United States. No where on the face of the globe will the power of steam be more extensively employed than here. Kind nature did not place one of her choicest gifts at our disposal, without the means of applying it properly and rationally. All natural forces are within the power and control of man. Man stands at the head of creation and nature is his school wherein to practice his faculties and gain experience. What is yet buried in mystery will become plain in course of time. To subdue natural forces and apply them for the practical purposes of life, is one of the objects of existence.

Fortunately, enough is known of the properties of steam to enable us to avert its dangers in most cases. All that is needed is an earnest effort on the part of the nation to apply the proper remedy, legislative and mechanical.

A law has been in force in France for the last thirty years, compelling owners of steam boilers to insert certain fusible plugs in certain parts of the boiler, which plugs will melt and let the steam escape, whenever its pressure and temperature rises above a certain point. This law is well enforced in France, and in order to insure the efficiency of the plugs, they are manufactured by the Government itself. The consequence is, that no explosions are heard of in that country. Mr. Fairbairn, in his last publication on the subject of steam, speaks of this French contrivance as the most reliable and safest, and one that has stood the test of long experience.

The despotic Government of France insure their citizens against explosions. What a sorry contrast between our rough and tumble democracy and that French scientific despotism! Is it really impossible to raise our standard of national virtue and intelligence high enough to prevent such wholesale human slaughters? These so-called accidents can not very well be charged to the accounts of a special Providence; they are, in most cases, but the legitimate and direct result of a culpable carelessness and gross stupidity.

The causes of steam boiler explosions are not fully understood; the nature of steam remains partly shrouded in mystery. We do, however, know positively that by far the greater number of explosions are caused by the sudden and instantaneous formation of high pressure steam, resulting from a sudden rush of water upon over-heated metallic surfaces. With few exceptions the boilers in our western waters are *high pressure*. They have flues inside, through which the fire passes from one end to the other. The level of the water is kept but a few inches above the uppermost flues. Whenever, from carelessness or design, the water is allowed to fall, the top of these flues will become overheated. An explosion, equal to that of gunpowder, is the inevitable result of a sudden return or new supply of water on these red hot flues. The safety of the passengers is thus depending on the watchfulness and intelligence of the engineer on duty. But the French Government makes it impossible for the engineer or any other person to endanger the lives of the passengers.

Suppose our steamboat owners, captains and engineers were compelled by law, at the risk of a heavy penalty, to insert two or three leaden rivets, one inch diameter, into the top of each flue; and suppose (almost impossible, though!) our General Government should see to the faithful execution of this law, could an explosion happen? No! Whenever by carelessness the water is allowed to fall too low, these leaden plugs will speedily melt and let the steam escape into the flues and up the chimneys. Common lead will melt at a temperature of 640 deg., while it takes 750 to 800 degrees to raise iron to a red hot state. Carefully prepared alloys would be preferable to lead.

This blowing out of the boilers, although free from all danger, is attended with serious delay and inconvenience to all on board. And this will be the immediate penalty suffered for their negligence. The officers will take care not to repeat the experiment, because the steamboat will be without steam at least one half day, until the boilers can be cooled down, and men go inside and insert new safety plugs.

But, of course, if the law is not enforced, the captain and engineer will prefer to insert

iron rivets instead of leaden ones! Hence the necessity of a healthy public opinion to enforce the law. Steamboat racing and carrying low water in the boilers must be frowned down. The officers of steamboats are no more to blame than the public. As the master, so the servant, is an old adage.

There is a steamboat law on the statutes; poor and unsatisfactory as it is, it is not half enforced! So we go on and repeat our explosions to the eternal shame of the nation!

The commissioners who in former years were appointed to examine into the causes of explosion, and to report remedies, have done some good. But their labors have had no practical effect. The writer, who is familiar with all they have done, recommends their re-appointment. Their labors should be continued until explosions are perfectly understood, and the proper remedies applied.

The present steamboat law allows 132 pounds pressure for a 38 inch boiler and $\frac{1}{4}$ inch iron. This pressure will exert a tensile force upon the iron, in the direction of the circumference of the boiler, equivalent to 100.32 pounds per square inch section, which is 1-6 of the ultimate strength of good boiler sheet. The strain on the iron in the direction of the length of the boiler is only one-half of that of the circumferential tension; this is the reason why the shells of our western boilers almost invariably burst *across* the body and seldom lengthways. In this calculation no allowance is made for rivetting and bad iron. But *single* rivetting will only give about one-half the strength of the solid sheet. Add to this a poor quality of sheet and rivet, and we can not estimate the strength of most boilers, when new, at more than one half the above figure. That is, steam of 132 pounds pressure we have scarcely three times the strength to meet it, while six times should be the rule.

But it is a notorious fact that in place of 132 pounds steam, seldom less than 150 lbs., and often as high as 220 pounds, are carried on our Western waters. In many cases the safety valve is loaded down so that it can not open, and steam is raised as high as the hottest fire from pitch and turpentine can make it. This is no fancy, but the sober daily experience. Our river men are no fancy men—they go in for high pressure and speed. Nor are they to blame; they risk their lives along with the rest. It is the public body that is to blame.

The above calculations have reference only to new, well-made boilers. Now consider the condition of an old, patched-up boiler, bought second or third hand, five to ten years ago. The effects of a hot coal fire, elaborating the strongest sulphuric gasses, scaling from rust and incrustations, these are the destroying agencies at work all the time. How much is left of the $\frac{1}{4}$ inch iron after ten years' incessant use? Perhaps not 1-8, and that of about one-half of the original strength.

The sober truth is that steamboat running is a bold game between life and death all the time! The real wonder with the reflecting is not the *great* number of annual explosions we hear of, but the *small* number!

It was remarked that low water is the principal cause of explosions on our western waters. The mere rent of the shell of a boiler, or the collapse of a flue, caused by the gradual increase of pressure or a reduction of strength is not an explosion, but generally passes off without any serious consequences. It is true that explosions of the most fearful kind have taken place when there was no

scarcity of water, and no very great pressure indicated by the safety-valve or pressure gauge. The best ascertained explosion of this kind on record, took place in the yard of J. P. Morris & Co., at Philadelphia, about seven or eight years ago. The facts connected with this explosion are well known to the writer. Several competent parties have attempted to account for it, but it remains a mystery. Let us have a new commission and let their labors be continued until all the phenomena of explosions are fully understood.

In order to give this paper a practical effect, I have addressed the highly respectable and intelligent bodies of gentlemen, who compose the Boards of Trade of the cities of Pittsburgh, Cincinnati, Louisville, St. Louis and New Orleans. All these cities are concerned in this question. The interests of commerce and commercial communications by land and water are closely allied; they come within the sphere of these Boards. My appeal to them I present to them in the following shape:

Hold a special meeting on the subject in question, and draw up urgent requests to your Representatives and Senators in Congress to unite in their efforts, at the next session, for the purpose of creating a new commission to examine more fully into the causes of explosions, to revise the existing statutes, and to report the provisions for a new law, which will guarantee more safety than the one now in force.

JOHN A. RØBLING.
Civil Engineer.

The above article from Mr. Røbling is one that should claim the attention of every person engaged in the use of steam, not only on our steamboats and railroads, but in the various arts and manufactures. It is entitled to serious consideration not only on account of the high source from which it emanates, but also from the great importance of the subject on which it treats. We would also, however, at the same time, call the attention of scientific and practical men to the plan of accomplishing the same object by the Harshman theory, as published in our issue of Feb. 7, 1856, which is by developing the latent heat contained in the water by electrical action, thereby preventing the sudden ebullition of gases, and although a pressure may be produced sufficient to rend the seams or to separate the particles of the iron, yet no violent explosion can take place. There is also one other practical benefit resulting in the Harshman plan, to which we ourselves, from actual experiment and long experience, can testify, that is, a large saving of fuel equal to at least two-fifths. This last is becoming daily of more and more importance, and considerations of interest as well as humanity should induce those interested to investigate it. Mr. Harshman's patent is simple and applicable to every variety of boiler, and is merely the investing the boiler all over, except on the fire surface with sheet copper. Further information may be obtained by addressing him at Dayton, Ohio.

Since the above was in type we observe an article from Mr. Harshman on this subject, in the Cincinnati Gazette, of July 14th.

CLIMATOLOGY OF NORTH CAROLINA.

BY DAVID CHRISTY.

Importance of this Subject—Blodgett's Climatology—Mean Temperature for the Four Seasons—Rain-Fall for the Four Seasons—Comparison with other portions of the United States—Averages for the Year—Tabular Statement—Adaptation to Grape Culture—Comparison with Vine Districts in Europe—Remarks of Mr. Blodgett on Vine Culture.

The value of the mountain district of North Carolina must depend, mainly, upon its adaptation to pasturage and the cultivation of fruits. An inquiry into its *Climatology*, therefore, is of great importance. Its *Meleorology* may be inferred from the facts in the article on "Fog and Rain in the Mountains." In reference to its *temperature* and *humidity*, as compared with other sections of the country, the information is quite satisfactory. The *Isothermal Lines** and amount of *Rain-Fall* have been traced by Blodgett, in his recent work on the *Climatology of the United States*, as compared with that of Europe. From this work the following facts are ascertained—the four seasons being taken separately, and his charts examined with care.

The line of 55 deg., mean temperature for Spring, starting in the Gulf Stream nearly midway between 35 and 40 deg. N. L., curves northward to near Washington City, and runs thence S. W., along the southern base of the Alleghanies, to a point west of Chapel Hill, N. C.; thence it runs west across the Alleghanies, at Black Mountain, to Knoxville, Tenn.; thence N. W. to Louisville, Ky.; thence W. to St. Louis, Mo.; thence S. W. to near Fort Scott; and thence by various extensive curves, crossing the plains and mountains to San Francisco, on the Pacific.

The line of 60 deg., mean temperature for Spring, starts in the Gulf Stream at Beaufort, N. C., and passes thence N. W. to Raleigh, N. C., thence curving S. W. around the western termination of the Alleghanies, it runs N. W. to Nashville, Tenn.; thence westward, by curves similar to those of the line of 55 deg., to the valleys of San Joaquin and Sacramento rivers, in California; and thence southeastward, to San Diego, on the Pacific.

The line of 50 deg., mean temperature for Spring, starts in the Atlantic, on 40 deg. N. L., and runs north of Philadelphia, in a curving line westward, to Pittsburg, Penn.; thence west to the Ohio State Line; thence S. W. to Columbus, Ohio; thence N. W. to Rock Island, in the Mississippi river; thence W. to Fort Desmoine, Iowa; thence N. W. to Fort Benton, near the head of the Missouri river; and, again, from Fort Desmoine, to Council Bluffs; and thence by various curves to S. W. and N. W. to Vancouver's Island, on the Pacific.

The line of 72 deg., mean temperature for Summer, starts at New York City and curves S. W. along the Blue Ridge, crossing the Alleghanies at Black Mountain, N. C., and curving N. W., then N. E., and again N. W., so as to pass a little to the south of Marietta and Columbus, Ohio, and thence westward in a very serpentine course, to the Pacific.

The line of 75 deg., mean temperature for Summer, starting at Baltimore, Md., curves, nearly in the same manner with that of 72 deg., to the S. W., and passing over to the N. W. end of the Alleghanies, runs N. W. to Louisville, Ky., and thence, after the manner of the lines for Spring, passes onward to the Pacific.

* Lines passing through places of equal mean temperature are termed *Isothermal Lines*.

The mean temperature of the districts under consideration, for Autumn, vary but little from those of Spring, except that Cincinnati is on the line of 55 deg., instead of 54.3-10th deg., and Columbus, Ohio, on 52 deg., instead of 50 deg.

The mean temperature for Winter, in the mountains of North Carolina, is from 35 to 40 deg. The same lines include Knoxville and Nashville, Tenn., and Louisville, Ky.—Nashville being on 40 deg. and Louisville on 35 deg. Cincinnati is on 32.9-10th deg.

For the Spring the greater portion of the mountain regions of North Carolina fall within the lines of 55 and 60 deg., mean temperature. That portion of the State through which the Rabun Gap Railroad is located, will be in the range of 57½ deg. mean temperature, for the Spring, but it will be more or less modified by differences in altitude.† The eastern portion of Cherokee county, N. C., may be taken as the representative point for this region. The mean temperature of Cincinnati, for the Spring, as indicated by its position on the chart, is intermediate between 50 and 55 deg. By the tables it is shown to be 54.3-10 deg.

These remarks need not be prolonged, by pointing out the mean temperatures for the other seasons, as the figures are presented in the tabular statement which follows the outline of the facts in relation to the *Rain-fall* of the districts under consideration.

The amount of *rain*, as shown by Blodgett's Charts, which falls in North Carolina, and in the region of Pittsburg, Louisville and Cincinnati for the Spring, is equal, being ten inches over the whole area. This being the season of germination and growth, the advantages of these districts, as to humidity, are equal.

The rain charts, for Summer, show that the mountain regions of North Carolina and the Tennessee valley, as far as Knoxville, have but twelve inches of rain, while the section including Chapel Hill, N. C., Louisville, Ky. and Cincinnati, Ohio, has fourteen inches. Raleigh, N. C., Milledgeville, Ga., Huntsville, Ala., Nashville, Tenn. and Little Rock, Ark., are included within a zone which has a fall of fifteen inches of rain in Summer. Pittsburg, and a large area north and south from that city, have but ten inches.

The rain charts, for Autumn, show that the mountains of North Carolina have but eight inches of rain, while Raleigh and Chapel Hill, N. C., Huntsville, Ala., Nashville, Tenn., Louisville, Ky. and Cincinnati, O., have ten inches. Knoxville, Tenn., Marietta and Columbus, Ohio and Pittsburg, Penn., have nine inches.

The rain charts, for Winter, give to N. C. ten inches of rain, and to Louisville and Cincinnati twelve inches.

The mean temperature for the year, as given in the *Isothermal Charts*, for the whole mountain region of North Carolina, and for Knoxville and Nashville, Tenn., Louisville, Ky., and St. Louis, Mo., is from 55 to 60 deg.; while Cincinnati has a mean temperature of 53.8-10th deg. The Rabun Gap Railroad passes on the line of about 59 deg. mean temperature, for the year.

The rain chart for the year, gives forty inches of rain to the mountains of North Carolina; forty-two inches to the next zone, or circle, outside, including Chapel Hill, N. C., and Marietta and Columbus, O.; forty-five inches to the next zone, including Raleigh,

† See the general principles on this point, as stated in the article on "Fog and Rain in the Mountains."

N. C., Augusta, Ga., Nashville, Tenn., and Indianapolis, Ia.; forty-eight inches to the next, including Charleston, S. C. and Cincinnati, O.; fifty inches in the next, including Savannah, Ga., Louisville, Ky. and Natchitoches, La.; fifty-five inches in the next, including Montgomery and Huntsville, Ala., Memphis, Tenn. and Little Rock, Ark.; sixty inches to the next, including Natchez, Miss., Baton Rouge and New Orleans; and sixty-three inches in the area including Mobile and Pensacola. Pittsburg, Penn., and a large area north and south of that city, have only thirty-six inches of rain in the year.

To afford some idea of the difference in the temperature and rain-fall in the United States, as compared with the vine districts of Europe, a few places in each are given to serve as a means of contrast. They are copied from Blodgett's Tables, or taken from his charts, and are presented as representative points for the districts in which they are included. The altitude above the sea level, and the latitude of each place is given.

PLACES.	LAT. Deg.	ALT.	TEMPERATURE. Degrees.	AM'T OF RAIN IN INCHES.
Lisbon, Portugal.....	38.42	sea level	Sum Aut. Wt Yr. Sp E Sum Aut. Wt Yr.	
Funchal, Madeira.....	32.37	1,200	69.6 70.9 62.5 61.4	7.0
Yverdon, Switzerland.....	45.51	817	53.1 53.6 48.1 46.8	1.3
Yverdon, France.....	45.51	300	56.2 57.1 51.0 49.8	1.3
Boisecur, N. France.....	45.51	sea level	56.1 57.1 51.0 49.8	1.3
Vevey, Switzerland.....	46.26	1,250	50.3 51.7 45.0 43.8	1.1
Manheim, Rhine.....	49.29	sea level	50.3 51.7 45.0 43.8	1.1
Dijon, E. France.....	47.39	149	50.3 51.7 45.0 43.8	1.1
Chabons, N. France.....	48.19	749	50.3 51.7 45.0 43.8	1.1
Cincinnati, Ohio.....	39.16	489	54.8 55.6 52.0 50.9	4.0
St. Louis, Missouri.....	38.27	359	56.3 57.4 53.9 52.5	4.0
Chattanooga, Ala.....	35.43	450	56.3 57.4 53.9 52.5	4.0
Chapel Hill, N. C.....	35.43	520	56.3 57.4 53.9 52.5	4.0
Cherokee Co., N. C.....	35.43	1,400†	57.3 58.3 54.9 53.7	8.0

From the foregoing facts, it would appear that North Carolina is more favorable to grape culture than any of the regions in the United States, with which it is here contrasted.† But upon this subject we must let Mr. Blodgett speak. After comparing the temperature and humidity of the United States with the vine districts of Europe, he sums up the results as follows:

"The most conspicuous feature of this comparison is the excess of temperature and amount of rain for the summer in America, as compared with Europe. Both these measures are here so far in excess, compared with districts in which a similar extent of vine culture exists in Europe, that the parallel seems to

* And the valley of the Rhone.
† Ranging from 1,400 to 4,500.
‡ The extremes of temperature in that State are not so great in winter as in Cincinnati. The lowest temperature in the former, for ten years past, occurred in the winter of 1855-56, and only once, in the Month of March, when the mercury fell to six degrees below zero. The record referred to is that of Mr. N. E. Guerin, at Vinona, in the midst of the mountains, and at an elevation of over 2,000 feet above the sea level

fail of significance or of application in this connection. We are, in truth, thrown upon a new trial and upon the development of new or native varieties which will bear the peculiarities of climate, in regard to which we differ from Europe too widely to transfer their most successful varieties. * * *

"The southern portions of the Alleghany mountains, bordering on the South Atlantic States, and those of the Gulf, possess general characteristics greatly favorable. They have less humidity than the plains below them, reversing the European law of humidity and aqueous precipitation in this respect: and their exposures southward and sheltered valleys most favor this cultivation in a very great degree.

"The present vine districts of Cincinnati, and other localities on the Ohio, and those on the Missouri, at Hermann, are very successful in every point except the liability to injury from excess of humidity and rains. The general climate will always present difficulties in this respect which the utmost care in cultivation and choice of position can modify only in degree."

This is theory. When we come to speak at large on the cultivation of the grape, and adaptation of North Carolina to its production, it will be seen that the practical results already attained are likely to sustain the theory very satisfactorily.

We may add here a remark of Mr. Blodgett upon the influence of the mountains of America upon the temperature of the country around them. It is important:

"It is singular that for the whole of the Appalachian system the elevations are not high enough, or the ranges not sufficiently continuous where high peaks are found, to cause any contrasts in climate on their opposite slopes. These slopes are every where equally well watered, and equally clothed with forests; and neither differs in any important degree from the plains in the vicinity. . . . We now scarcely regard the Alleghanies as disturbers of any condition of climate, except in the moderate degree produced by altitude alone, as they are ascended."

CINCINNATI AND CHICAGO RAILROAD.

We learn that the work on this road between Logansport and Valparaiso, a point on the Fort Wayne and Chicago Railroad, has been, or soon will be, let to responsible parties, with a view to its being pushed forward to completion, at the earliest practicable moment.

A correspondent of the Dayton Journal states that the iron has been purchased and is ready for delivery. It is expected that in fifteen months from this date, the entire line will be in full operation from Cincinnati to Chicago. The distance from Valparaiso to Chicago is 43 miles, making the distance from Logansport to Chicago, less than 103. The 59½ miles about to be put under contract have but a single curve, and that a very slight one; the country is level for the whole distance, with the exception of the 2½ miles next to Logansport.

The opening of this railroad will shorten materially the distance between this city and Chicago, as may be seen by the following

table which we give on the authority above quoted:

	Miles.
Cincinnati to Chicago—via the new line.....	280
“ “ “ via Indianapolis, Kokomo, Logansport and Valparaiso. Passing 124 miles over the new line.....	290
Cincinnati to Chicago—via Indianapolis, La Fayette and Michigan City, being the shortest present line.....	324
Chicago to Indianapolis—via Valparaiso, Logansport and Kokomo. Passing 124 miles over the new line.....	178
Chicago to Indianapolis—via Michigan City and La Fayette, being the only present line.....	212
Chicago to Louisville—via Valparaiso, Logansport, Kokomo and Indianapolis. Passing 124 miles over the new line.....	286
Chicago to Louisville—via Michigan City, La Fayette and Indianapolis.....	320
Chicago to Louisville—via Michigan City and New Albany and Salem Railroad.....	345

The Journal's correspondent thus speaks of the future of this road, with which we fully agree:

As to the future prospects of the new line, it is to be considered, that besides the through business, its local trade in a few years must be increased enormously. A large proportion of the country along the line from Richmond to Logansport is still unimproved. The land is good, much of it heavily timbered, and in the very nature of things must ere long be brought into cultivation. Between Logansport and Valparaiso, the country is new, and for more than half the distance the land is first class, the remaining part is rather poor, but still not unworthy of attention for agricultural purposes. All things considered, therefore, and making due allowance for all reasonable deductions from the large estimates of profits and advantages with which railroad enterprises are ordinarily heralded, it must be admitted, that the prospects of the Cincinnati and Chicago are as bright as any railroad in the west.

MONETARY AND COMMERCIAL.

During the past week the same monotony of the money market that existed prior to the first inst., still continues. Indeed it can not be otherwise as long as we have the present inactive state of general business, which will not meet with any material change until the opening of fall trade. Quotations for first class paper are from 8 to 12 per cent., most of it being done at 10; paper, however, that may be regarded as speculative, meets with as little favor as heretofore, and rates are merely nominal, being fixed by the wants of the parties offering.

Exchange partakes of the dullness of the general market. Buying rates on the east are ¼ prem. and selling ½ prem.

THE STOCK MARKET FOR THE FIRST HALF 1858.

Notwithstanding the great abundance of capital in all the business centers of the country, the prices of the leading stocks remain at a very low figure, as may be seen from the following quotations, which we find in the N. Y. Courier and Enquirer for July, 1856, January, 1857, January, 1858, and 30th June, 1858:

	July 1856.	Jan. 1857.	Jan. 1858.	June 30, 1858.
U. S. 6 per cent. 1867-8.....	115½	116	112	112½
Ohio 6 per cent. '75.....	105	107	103	105
Kentucky 6 per cent.	104	104	99	109
Indiana 5 per cent.	82½	81	81	87
Pennsylvania 5 per cent.	83	84	82½	89½
Virginia 6 per cent.	95½	90	91	95
Georgia 6 per cent.	100	98	90	101
California Sevens. '70.....	74	78	66½	85½
North Carolina Six do.	97	97	91	99½
Missouri 6 per cent.	85½	78	79½	87½
Louisian 6 per cent.	95	92½	82	96
Tennessee Sixes.....	—	—	82	94

* Interest off.
From this it will be seen that Ohio Six Per Cents. were worth 107, eighteen months ago, and are quoted at 105 now. None or very few question the ability of Ohio to meet its finance engagements

Relative to Railroad Securities, the Courier and Enquirer remarks that public sentiment shows a want of confidence in railroad management; although prices are much higher than in September and October last. From the annexed summary it would appear that New York Central Shares are held 9 per cent. less than in July, 1856; Erie 39 per cent. less; Harlem nearly 7; Reading 46; Hudson River 6½; Michigan Central 47; Michigan Southern 75; Illinois Central 25; Cleveland and Toledo 43. This summary does not include the extraordinary period of September and October, 1857, but embraces the high prices of January, 1857, and the opening of the year 1858.

RAILROAD SHARES.

	July 1, 1856.	Jan. 1, 1857.	Jan. 1, 1858.	June 20, 1858.
N. Y. Central R. R. shs.	91½	93¾	77¾	82½
N. Y. & Erie R. R. shs.	56¾	62¾	19½	17½
Harlem R. R. shs.	18½	15¾	6½	10
Reading R. R. shs.	90	84½	58	44
Hudson Riv. R. R. shs.	33	30½	19½	26½
Mich. Cen. R. R. shs.	97	93½	52	52½
Do. Southern R. R. shs.	952	87½	20½	21½
Panama Railroad shares	102½	93½	90½	107
Balt. & Ohio R. R. shs.	57½	85	49	57
Illinois Cen. R. R. shs.	190	124½	90	75
Clev. & Toledo R. R. shs.	75	77	43½	32
Chicago & R. shs.	—	—	72	73½
Milwaukee and Koss.	—	—	31½	20½
Galena and Chicago.	—	—	73½	85

In October last New York Central Shares sold at 53; Erie 9¾; Reading 26½; Hudson River 13½; Michigan Southern 11½; Baltimore and Ohio 37½; Galena and Chicago 51½; Chicago and Rock Island 51½; while Erie R. R. Bonds sold at lower prices than they do now. The Sinking Fund Bonds were then quoted at 20½. Seven per cent. Mortgages of 1859, 52½. Convertibles of 1871 sold at 17½. New York Central Six per cents sold as low as 63½; Illinois Central Seven per cents. 60½. The Courier adds: The difficulties that have since transpired in Railroad management have caused a distrust of the ability of many of the Railroads to meet their engagements eventually; hence their Bonds are quoted at 10, 20, 30, 40, 50, 60 and 70 cents per dollar—and few are rated above 60. The annexed summary of values for two years past will be interesting at the present time and worth preservation for future reference.

RAILROAD BONDS.

	July 1, 1856.	Jan. 1, 1857.	Jan. 1, 1858.	June 30, 1858.
Erie R. R. 7½, 1859.	88	98	87	93
Erie Bonds 7½.	94	96	41½	32½
Erie Convertibles 1871.	84	88	36½	32½
Hud. Riv. R. R. 1st Mort.	100	95½	97	102
Panama R. R. bonds.	100	97	85	108
Illinois Central 7½.	92½	99	86	85
N. Y. Central Six.	89	87½	83	89
Canton Co. shs.	227½	23½	19	—
Pennsylvania Coal Co.	96½	96½	70½	74½
Cumberland Coal Co.	19½	19½	11½	—
Del. & Hud. Canal Co.	119½	119½	110½	97½

Many of the Western Railroad Companies are under protest for non-payment of their coupons. The list is an extraordinary and melancholy one—extraordinary as a part of the financial history of the times, and melancholy to the bond-holder. The payments of coupons at present do not amount to one half what they were in July 1856.

TUBULAR RAIL.



Railroad Managers will be interested in an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over ANY RAIL hitherto made, among them the following:
The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.
Its density is greater.
Its welding nearer perfect, and its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.
Reference is made to the officers of all the railroads in the vicinity of Cincinnati.
Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.
June 17.—Jyr.

CHICAGO GREAT WESTERN
AND NORTH-WESTERN ROUTE.
INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD

VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Keosauqua, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

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Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

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Also, No. 2 Burnett House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
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Successors to and members of the late firm of

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Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained from the undersigned owners of the Patent.

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O. W. CHILDS, Syracuse, N. Y.

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Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for building of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
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SOLICITOR OF PATENTS,

And Consulting Engineer,

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1500 TONS RAILS, 57 lbs. per yard;
500 tons do, 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

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NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.
July 14, 1857. Jy23-1m

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For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,
Respectfully Yours,

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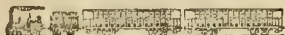
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ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

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Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

Or SUMNER SMALL, Boston, Mass.

ap8

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Supply all material and articles used in the construction and operating of railways

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PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

6 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

From ½ to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

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1856

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4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard, 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

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Locomotive & Hand Lanterns,

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COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND.

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Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro

JOEL C. LANE

feb1tr

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trestling B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet Bridging. 44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860. WM. B. MUFORD, President. Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

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MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheet Metal always Iron.

The Bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges

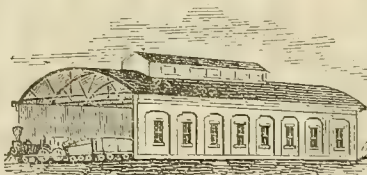
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting. Office, NO. 66 West Third street, Cincinnati, O. may13. MOSELEY & CO.

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DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers, MASSILLON, OHIO.

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Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16+*

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SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

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THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

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No. 298 H Street, Washington, D. C

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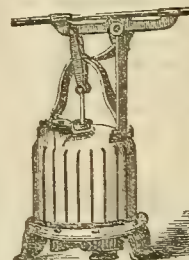
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 16, 1855—ly

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1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

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Mar. 25, 18.

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THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

☞ FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 6:45 A. M., 3 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK AND BOSTON.

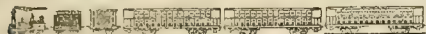
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And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

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Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

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THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

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ON AND AFTER MONDAY MAY 10TH

1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

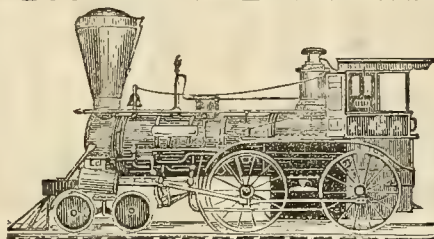
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

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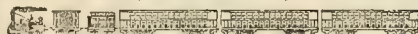
1858 1858.

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OHIO AND MISSISSIPPI

(BROAD GAUGE)



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TWO DAILY TRAINS FOR

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Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.

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MIDDLETON, WALLACE & CO.,
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Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

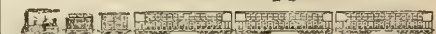
Leave Dayton at 8:05 A. M., 2:30 and 6:30 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

☞ A Steamer leaves Racine for Chicago every even ing.

☞ Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup't.
Racine, May 15, 1857.

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Opposite Public Landing,
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We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for sale. Also, a full assortment of the Pomeroy Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.
Cincinnati, March 5, 1856

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

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STEAM BOILERS and WATER TANKS of any size or description.

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WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

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STATIONERS, BOOKSELLERS,
—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
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KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

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Printed to order in the best manner.

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OFFICE:
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SCHENECTADY
Locomotive Works,
SCHENECTADY, N. Y.

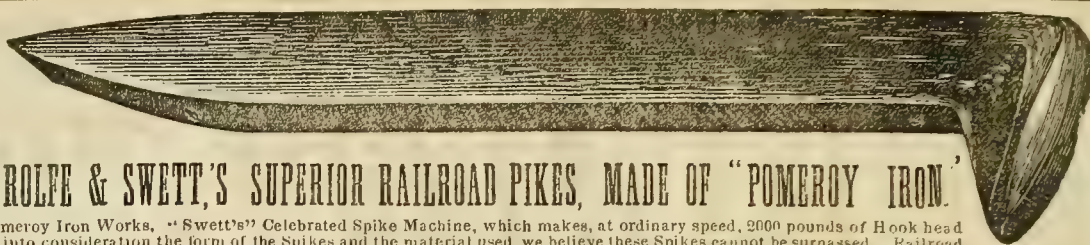
THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,
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RAILROAD MACHINERY

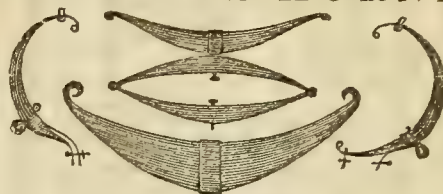
generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Aul6.1y



MCDANIEL & HORNER,
LOCO-MOTIVE AND CAR SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

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May 19

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Most Reasonable Terms.

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MACHINERY.

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RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents, with Time-tables only.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents, with a complete Steamboat Directory.

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It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

js30

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....JULY 22, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

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Subscriptions and communications addressed to

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DETROIT & MILWAUKEE R. R.

The Valley City *Advertiser* very naturally exults over the completion of this important road to Grand Rapids. The first train of cars ran into the depot at that place on the 5th of July. This city, (it states,) has now connection with the white settlements, and is no longer out of the world. The citizens of that place made a fine demonstration in honor of the event, fired guns, had a procession certainly a mile in length, (if as long as the programme,) and let off a splendid display of fireworks in the evening. The *Advertiser* thinks the growth of Grand Rapids, a city of some 10,000 inhabitants, has but just begun. That her railroad and steamboat facilities will henceforth give her such an impetus as will in a few years make her a first class city. We hope its predictions will be realized.

FREMONT AND INDIANA RAILROAD.—The *Fremont Journal* says the work on this road has commenced in earnest, and will be pushed forward to completion rapidly. The laying of the iron was commenced on Monday, the 5th inst., and we had the pleasure of driving the first spike. Over half a mile of track has been laid this week. Iron for four or five miles has already been delivered, and more afloat on the lake is daily expected.

CROPS AND AGRICULTURAL PROSPECTS FOR 1858.

The present prospects for agricultural productions for 1858 are by no means so good as many suppose them to be, and will undoubtedly be largely short of a fair average. We know this is not the common idea; for many of the newspapers constantly harp upon what they call “croaking,” and treat, as imaginary, all statements to the contrary. There is no doubt enough of *croaking* in all seasons; but this is no reason why plain and obvious facts should not be credited. Seasons and crops are various, and there will be both the good and the bad. Why should we misrepresent them? In 1850, Ohio produced thirty-two millions of bushels of wheat; but in 1854 but *twelve* millions! Would it have served any good purpose to have told the world in the summer of 1854, that the crop was a good one? The fact is, we can form no idea of the crop only by accurate observations; on these we may trust our eyes, much better than the random guesses of many who write for the papers. In Ohio, which is the leading agricultural State, we take the facts to be thus:

1. The Wheat will not reach a fair average crop.
2. The Oats will not be over half a crop.
3. The Corn will be only two-thirds of a crop.
4. The Grass and Hay is not remarkably good.

5. Barley is very good, but is a small crop. Now putting these things together, it appears that the two heavy crops of corn and oats will be largely short, and the others will have no excess of supply.

Taking the *averages*, as returned in the Commissioner of Statistics Report, the above statement as correct, and the crops of this year will be short, as follows:

Wheat	18,000,000 Bushels.
Oats	10,000,000 “
Corn	50,000,000 “
Hay	1,500,000 Tons.

Now, if we compare this with the actual crops of 1855, (a very abundant year) and the falling off will be as follows:

Wheat	2,000,000 Bushels.
Oats	10,000,000 “
Corn	37,000,000 “
Hay	400,000 Tons.

Taking these at average prices, and this deficiency is, in money, as follows:

Wheat	\$1,600,000
Oats	3,330,000
Corn	13,000,000
Hay	3,000,000

Aggregate

This is, of course, an estimate, if you please, *a guess*; but it is based on both observation and report. It seems to be agreed on all hands, that the *oats* are very poor; and equally agreed that the corn is late and unpromising. The latter crop being the staple of the country, we think will compara-

tively fare better than the others. But it must be recollected that there has been much less ground cultivated this year than usual. In some places it was planted and washed out. In some places it could not be planted on account of the rains. There are a great many *fallow* fields this year—a thing heretofore unknown. The soil will gain by it, but the crops of this year will be diminished. We have not written this for the sake of *croaking*, but have written simply what we have seen and known and heard. It will be well for the country if we should turn out to be entirely incorrect. In other States, prospects are on the whole very much the same; but, we think, the entire country south of the Ohio, will present a far better aspect than that north of it. Indeed, we have not heard that the crops in Kentucky, Tennessee and Georgia are materially short. On the contrary, we believe they are rather above the average. In Indiana, on the contrary, the crops are no better, certainly, than in Ohio. Further west, we have no accurate accounts. On the whole, the product of grains and grass in the valley of the Ohio, taken altogether, are not likely to reach an average. On the contrary, there will be a deficiency. What will be the effect of this?—asks many. The first effect undoubtedly will be to diminish the exports of next winter and spring; but to counteract this, there is a large stock of grain on hand. Taking this stock into view, and the disposition to export the early receipts, we think the business of exportation will not diminish this fall, but will feel the effect chiefly next spring. The receipts of the last half of 1858 on railroads will probably be very good.

Two other circumstances must be taken into view in estimating the true effect of the crops on business. One is the condition of the Money Market. Money and capital are both more abundant than they have been in twenty years. In the United States money was never so abundant. In Cincinnati, good commercial paper can be discounted at 6 per cent., and in New York at 5 per cent. The consequence of this state of things is, that property will not be sacrificed, nor any fair enterprise fail for want of means. Grain and provisions will command all they are worth. Prices, therefore, will not be forced down for want of money, and the farmers will get the value of their produce. In the long run, a good price nearly balances the deficiency of crops. One hand makes up what the other wants. Another consideration is the state of crops in Europe. Crops there are said to be good. If so, we shall not export very much, and we shall certainly have enough for ourselves. This review seems to show that the good and evil of agricultural productions this year will be nearly balanced.

RAILROAD COMPETITION.

Fair, honorable competition among railroads, as well as in other branches of business, is generally beneficial, not only to competitors themselves, by leading to thorough system and economy in the management of business; but to the public at large, by keeping prices within moderate limits, and preventing monopoly and extortion. Yet, when competition and rivaling are carried to ruinous excess, and individuals attempt to crush out rival interests at the expense of their companies, nobody is benefited, while the community becomes a great sufferer; for it is perfectly impossible that any great interest, like a railroad for instance, can be conducted at a serious loss, without all branches of business in its vicinity being seriously affected.

The fact is apparent on every hand, and needs no argument to show it. Make our railroads fair dividend paying stocks, and not a single branch of industry in the land but would immediately feel the beneficial influence. This, however, can not be done so long as our railroads are managed, or mismanaged, as at present. There is too much of the old fashioned steamboat and packet "runner spirit" in most of the present railroad managers to hope for a change of policy, except by a change of managers.

This may seem like a pretty severe remedy, and somewhat like taking a man's head off to cure vertigo; but if a care were exercised in filling their places, there can be little doubt that it would be entirely successful.

Nobody doubts the opinion that there is traffic enough passing over our principal thoroughfares to pay a fair dividend on the investments, without in any way oppressing any branch of business connected therewith. All that is wanted is a little forbearance, a little common sense, and a little compromise on the part of those in power, and the thing can be done. There is no good reason why the great lines out of Cincinnati, or any other city, should assume such hostile attitudes. All have equal rights, and nobody an exclusive patent to the business; and if Messrs. Presidents, Directors & Co., of the different railroads would lay aside *personal rivalries*, we fancy there would be very little difficulty in bringing about arrangements that would add immensely to the interests of all.

The fact is, railroad managers have attempted too much. They have not been content with what legitimately belonged to them, but they have endeavored to monopolize business that of right belonged to others. Instead of confining themselves to their own bailiwick, and taking care of the interests that immediately devolved upon them, they have been constantly over-running their bounds and trespassing on other preserves. They have sent agents all over the country—opened offices every where—sent out an army

of hungry "runners" to drum up business, at any price, and at all prices so as to "crush out" opposition; but in so doing they have pretty nearly "crushed out" themselves; while their business at home is but indifferently looked after.

Now the remedy for all this confusion, ruinous competition and angry warfare, is for each company to confine itself to the business that properly belongs to it—appoint the best man that can be found to manage affairs—withdraw all outside offices and agents, except at a few principal points where they may be servicable in giving information—fix the prices of transportation at fair paying rates, no more—cut off all express and transportation companies, except those doing a small parcel or package business—and leave the public to choose their own routes, when it will soon be evident that those lines which do their business the most promptly, and in the fairest manner, will receive the largest patronage and at paying rates. But so long as railroad companies do so much to encourage rivalry and under bidding, by keeping a parcel of worthless runners and agents for that express purpose—for no other result could follow such a course—and allow rival Express companies to compete with them for their own business, they must expect nothing but ruin to follow in their wake. It is these runners and transportation agents who bring about and keep alive most of the ill feeling existing between rival railroad officers; and they are the very rascals who are most active in thwarting and breaking up every amicable arrangement or compromise between companies; for, like diplomatists, their very existence depends upon their discords and dissensions. The sooner they are abolished, then the sooner we shall have peace, plenty and prosperity on our railroads. We owe these gentlemen no ill-will; but we are convinced that either they or the railroads must be sacrificed; and as they are at present the "smaller state," the sooner they are thrown overboard the better; for if the matter is much longer delayed they will be the stronger party, and stockholders may whistle for their investments.

We are aware that the difficulties in the way of bringing about these results are very great, and can probably only be overcome by the intervention of third parties disconnected with railroads. Men who have stood in a hostile attitude toward each other for years, can not be expected very readily to compromise their difficulties upon the fairest and most equitable terms. "Peace Commissioners," therefore, will be necessary, and if they are judiciously selected, there can be no doubt that the fiercest and most bitter "railroad war" can be amicably and profitably adjusted in twenty-four hours.

This is a matter of vital importance to all

our railroad interests, and it is to be hoped that it will receive early and earnest attention from stockholders of railroads in all parts of the country.

GEORGE S. YERGER AND THE SOUTHERN PACIFIC RAILROAD.

Having previously devoted so large an amount of space to documents relative to this unfortunate enterprise, we feel a delicacy in occupying so much of our space with the report of its late president. But as it was impossible to do justice to Mr. Yerger, by giving extracts, and as it tells some of the family secrets not before given to the public, we concluded to give it entire, promising those of our subscribers who are not so deeply interested in this subject, as we know many of them to be, to avoid as much as possible such lengthy articles in future.

Mr. Yerger makes a great effort to sustain himself on his "trust deed" enterprise; but from the points made in his report we confess our inability to discover its necessity, and all the *flummiediddle* about *bona fide* stockholders, "especially those of 'New Orleans,'" we regard as merely designed to soft-soap those who have been but poorly treated at best.

REPORT

Of Geo. S. Yerger, late President, etc., to the Stockholders of the Southern Pacific Railroad Company, in reply to the charges of Vice President Post; R. T. Archer, etc.

To the Stockholders of the Southern Pacific Railroad:

I deem it a duty to the late board of Directors of the Southern Pacific Railroad Company, as well as to myself, to report the facts connected with my administration, and to correct the many misrepresentations as well as concealment of facts contained in the report of the Vice President, Mr. Post, published in the *Picayune* of the 16th inst., and in a communication by Col. Rich. T. Archer in a previous issue of the same paper. I will not charge those gentlemen with willful and intentional falsehood; they may have been ignorant of many facts omitted by them, and may have acted on wrong information in regard to others. I will submit the whole facts to you and to a candid public.

I was induced to accept the Presidency of this company only with the hope that I might further the success of a great enterprise in which the South was particularly interested. No man could have been more devoted to the interests of the company than myself. All my aspirations were for its success. I have knowingly left undone nothing which could secure the completion of the road, and I have done nothing unsanctioned by the Directors, and which good faith and the performance of my duty did not demand.

Soon after my connection with the Company, I found many difficulties to encounter—difficulties I sincerely hoped to overcome, and which in the main arose from causes connected with the previous management of the company, unknown to me, but which, if known, would have prevented my accepting the office of President, or in any way connecting myself with the enterprise. I knew nothing of the affairs of the company individually, and would have nothing to do with it,

until I got a full statement from Mr. Post, the Vice President. I had implicit confidence in his statement, because I had seen a letter from Brown, Brothers & Co., stating that Mr. Post was a man of integrity and honor who might be confidently trusted. I will not state that Mr. Post intentionally concealed anything or willfully deceived me, but it is certainly true that there were facts within his knowledge which would have materially influenced my action, and which were not communicated to me. I will here particularly mention the contract made by the old Directory with the Messrs. Brown, by which these gentlemen were to receive about one-fifth of the stock in the whole road for certain services—a fact also known to Col. R. T. Archer, but which he also failed to communicate to me.

The debts of the company were represented not to exceed \$125,000, except some outside claims of small import, whereas, in truth, it appears from the action of the Executive Committee in New York, of which Mr. Post was chairman, that these claims amounted to several hundred thousand dollars, most of which the Executive Committee agreed to pay in the stock of the company. In addition it was represented that the assets of the company available for the payment of debts and the construction of the road, were worth about \$700,000, whereas, thus far, except the item for iron rails, they have proved so valueless that the company has been able to realize but little benefit from them.

Had I known that the company was encumbered with a contract of the extraordinary character made with the Messrs. Brown, that it was so largely involved in debt with claims for stock against it, and that its assets were so unavailable, I certainly would not have connected myself with it, or advised the public to participate in an enterprise which these circumstances rendered of such doubtful success. I am aware that the excuse made for not informing me of the Brown contract, is that they supposed it was forfeited, yet the Messrs. Brown were on the road proceeding with their work under their contract, and my subsequent investigations induced me to believe this was a matter of very much doubt, and the opinion of the late J. Pinkney Henderson, whom I consulted, was that the Browns could enforce it.

The main, if not the only causes of my assailment, have grown out of the execution of the deed of trust by the Company, in October last. I will briefly state the circumstances under which it was executed, and feel satisfied that a candid public will not only exonerate the directory and myself from blame, but will approve our action in the premises.

At the time the company was re-organized in New Orleans, I believed from estimates furnished, that for \$600,000, twenty-five miles of the road could be completed, and enough more graded, to obtain from Texas 256,000 acres of land, and a loan of \$150,000. The directory, for this purpose, authorized the issuance of 5 per cent. stock, to the amount of \$600,000, and no more, and it became a part of the contract of subscription, that no more should be issued.

Some short time after the subscription commenced in New Orleans, where about half of this amount was expected to be raised, and before the books of subscription were opened at many other points, large amounts of 5 per cent. stock were sent to different places for sale, as I afterwards learned as low as \$2 50

per share: this, in connection with a report which was widely circulated, but which I then did not believe, that there was an immense debt due by the company, deterred parties from subscribing, and prevented \$600,000 from being raised. It is not improper to state in this connection, that the stock so thrown on the market at a reduced rate, was issued by the Executive Committee, in New York, of which Vice President Post was a member. This stock was issued by the Executive Committee, in New York, most of it, I believe, in settlement of claims alleged to be due by the company, and not for money paid on subscription for stock.

The directory had authorized the Executive Committee, by a vote, at a meeting at which I was not present, to issue 5 per cent. stock, but not under par, and to settle the debts and claims against the company, existing prior to the re-organization at New Orleans. I do not believe such authority would have been given to Mr. Post or the Executive Committee, had the Directory been possessed of information subsequently obtained of the amount of the claims as developed in the proceedings of the Executive Committee.

On the 13th of May, 1857, the Executive Committee, at New York, without the knowledge of the Directory, and without authority, passed a resolution in these words:

Resolved, That Edwin Post, R. M. Stratton, and F. M. Dimond, be and they are hereby empowered to sell such portion of the \$12,000,000 of 5 per cent. stock lately ordered to be issued by the Directory in New Orleans, as shall remain unsold by the 15th of June next, on the best terms in their power, to enable them to meet the engagements of the Company, to continue the construction of the Road—said portion shall not be sold for less than sixty cents on the dollar.

The Executive Committee, without authority of the Directory, authorized Mr. Post to settle certain claims against the company, in stock, at the rate of *sixty cents on the dollar*, or \$3 00 per share—what amount of stock, if any, was issued by Mr. Post under this assumed authority, he can, perhaps, inform the stockholders, but certain it is, that sundry stockholders were offering stock in various places, as low as \$2 50 per share, and, perhaps less, while the directory were urging the subscription to be taken at par, by which course the value of the stock was reduced so low, that Dr. Fowlkes, during the summer of 1857, in a communication made to the Executive Committee, states—

"Stock has been sold since I got here, at \$1 80 for \$5 00. stock; this does not affect the value, but cuts off sale; all sales seem now cut off by the stock offering of certain stockholders of this company—renewing all the doubts and suspicions existing in former times."

It is true that the directory, on investigation, believed that no intentional fraud was intended in the issuance and sale of the stock, since the New Orleans organization, yet they believed it erroneous and indiscreet, and prejudicial to the interests of the company.

I do not pretend to enumerate all the acts of the Executive Committee, and I merely allude to them, to show, that to this cause, more than to all others, must be ascribed the failure to obtain subscriptions to stock to the necessary amount of \$600,000, which was, in fact, the primary cause of the disasters in which the company, since its re-organization, has been involved.

By a provision contained in the Charter, the company was required to complete twenty miles of the road by the 16th of February, 1858, and if not so completed, the Charter was declared "null and void," and the rights and

franchises under it absolutely forfeited. Hence it became the most imperative duty of the directory, to use every lawful means to complete the required number of miles, and save the Charter, and to that end all their energies were given.

On the 1st August the company was wholly without means, and while the credit of the company was greatly impaired, from the foregoing causes, I applied to a personal friend for the loan of \$10,000 for the use of the company, offering him the acceptances of Stillman, Allen & Co., held by the company for that amount; but he declined making the loan, or taking the acceptance, until I gave my personal pledge that the money should be repaid. The sum so borrowed, was applied to the use of the company. At maturity, the acceptances of Stillman, Allen & Co., were protested, and I became personally liable as guarantor for their payment.

In the fall of that year, an unexpected commercial panic swept over the whole country; the credit not only of Railroad Companies, but of private individuals, was temporarily paralyzed.

In the month of October, the company was left without a dollar to pay its debts or prosecute the work. The creditors and laborers became clamorous for payment. The Chief Engineer and Col. Scott, a director, reached New Orleans from Texas. They stated that an attachment was about to be taken out against the company, which, if done, would cause a forfeiture of the Charter, as it could not be dissolved in time to complete the work by the 16th February; that the hands, if not paid, would leave, and if they ever left, the road was lost, because if the company had the most ample means, there was barely time, without the loss of a day, to complete the twenty miles within the period required by the Charter,—that the bills drawn by the Treasurer had been protested for non-payment, and if not paid, attachments would be immediately taken out. In a word, it became certain if some means were not instantly taken to raise money, the Charter would be inevitably lost, and the interest of the stockholders entirely blasted. In this state of things I immediately convened the Directory. By their authority, I endeavored in New Orleans, to raise a sufficient sum to carry on the work, offering a high interest, and offering to pledge the iron rails of the company, worth ten times the amount we asked. But such was the universal panic and want of confidence, that not a dollar could be raised. I then determined, at great personal inconvenience and heavy pecuniary loss, (as will hereafter be shown) to go to Texas and try there to raise the money necessary to carry on the work, and save the Charter.

The Board of Directors, therefore, with a full knowledge of all the facts, and as the only alternative to prevent the entire loss of all that the company had previously done, passed a resolution authorising me to execute the deed of trust, which, in certain quarters, has been made the subject of complaint.

This deed of trust was not executed until the 19th of October, 1857, and after every effort had been made and failed, to pay the contractors on the road and prosecute the work. Dr. Fowlkes had entered into an agreement during the summer of 1857, to provide the means to pay T. J. Grant & Co., the contractors, and other ordinary and accruing payments of the Company. He stated in a communication made in the month of August, to the Executive Committee, that "Grant &

Co. must be paid—the credit and absolute wants of the Company must be preserved at all costs, and at every sacrifice.” He likewise stated, “I stand pledged to provide the payment of T. J. Grant & Co.” And again he said: “I must see the pledges of the New Orleans directory fully redeemed, if at personal, individual sacrifice.” The Directory in New Orleans were from time to time assured by Mr. Post, that money would be sent from New York to meet the pressing wants of the company, notwithstanding all of which, no money was forwarded, and the affairs of the company had reached that point, when it was absolutely necessary to do something to prosecute the work and save the company from utter ruin. Under these circumstances the directory authorised the execution of the deed of trust.

Upon my arrival in Texas, I found things in a deplorable condition. A belief universally prevailed, that immense frauds had been perpetrated in New York, unknown to the stockholders, and destructive of their interests. The hands were about leaving, threatening to destroy the road if not paid; suits by attachment were threatened, and the citizens of Texas, interested in the road, were determined to let the road be forfeited and not to extend aid to the amount of a dollar. With great difficulty, I succeeded in allaying the excitement, induced the hands to continue the work, and finally got several prominent gentlemen who were stockholders, and those only who could afford me aid, to agree to advance enough money to complete the work necessary to secure the Charter, upon the express condition that it should be positively repaid by the 15th January, with the distinct understanding if not paid by that time, that the deed of trust should stipulate for an advertisement and sale by 1st of February.

I may here premise that it was the determination of these gentlemen not to advance a dollar because of the fraudulent stock—and said that the Charter might be forfeited. But I said to them, if you save the charter you secure the Southern route and secure the road, and as to fraudulent stock it can be got clear of by bill in Equity—or if the money due upon the deed of trust, which I offered to execute, was not paid as required, the road could then be sold, and as they controlled the money, they could purchase or have it purchased for all *bona fide* stockholders, and thus get clear of all fraudulent stock. And I said as the times were critical and if the panic continued, I thought it possible the company might fail to raise it—in such an event a sale of the road would become necessary, and upon that supposition, these gentlemen agreed to raise the money, and, as a part of the arrangement, I got all the gentlemen, except one, to agree, in writing, that if the road was sold and they or either of them purchased it, the *bona fide* stockholders should have a like benefit of the purchase with themselves. This deed of trust saved the road. Without it money could not have been raised; with it the money was raised, and the work permitted to go on.

The question then presented to me, was: shall I let the work stop, permit the discharge of the hands, and thus forfeit the Charter and lose it forever; thus sacrificing all that had been done and paid by the stockholders; or, shall I take the money on the terms proposed, and save the interest of all? I had no hesitation in adopting the latter alternative. By this arrangement the company had three month's time to raise the money, which was subsequently extended to six months.

I will now advert particularly to the report and charges made by Vice President Post:

1st. Mr. Post says that in the month of August or September, the Executive Committee was informed that \$50,000 was necessary to finish the road, and arrangements were made to raise it, and the party agreeing so to do, proceeded to Memphis where he found a notice in the papers, that a deed of trust was executed on the road to sell on ten days notice, and that this defeated that arrangement. It will be observed that during the months of August and September and up to the 19th of October, the money was not raised. Telegraphic despatches and letters were received from time to time stating that it would be sent, but it did not come. In the mean time the company could not go on without means, and it was at this crisis I used my individual credit to prevent an utter failure. The money thus raised was soon exhausted and the promised funds from New York were not yet received. In consequence of this failure, the Treasurer's drafts for money due to laborers and for materials, etc., were protested.

When it was proposed at the meeting of the directory that I should go to Texas and raise the money there by a deed of trust, Col. Scott stated it could not be done, although the money was there, because it was universally believed that this course would only advance the interests of northern men who held large amounts of stock voted to them without an equivalent. I gave it as my opinion it was our duty to raise the money at all hazards. I stated that a deed of trust on the property would be ample security—that if the money was paid by the company, and the deed of trust satisfied without a sale under it, the alleged frauds could be inquired into in a court of equity—if upon the contrary the company did not pay the money, and the property had to be sold, it could be purchased for all *bona fide* stockholders and that this would exclude all holders of fraudulent stock. But as the amount required was small compared with the value of the property, it was suggested if the deed was executed and other creditors were not protected by it, the property embraced in the deed might, and in all probability would, be attached by them, and thus the progress of the work be arrested, and the completion of the road as required by the charter, defeated. It was therefore believed that the only sure mode of saving the road was to include all creditors in the deed of trust, who thus seeing they were secured, would make no attempt to collect their debts by force. It will be thus perceived if the deed of trust had not been executed at the time it was, even if the money had been raised at Memphis, as Mr. Post suggests it might have been, it would have been too late for any effective purpose. Attachments would have been levied—the work on the road stopped—the hands dispersed, and probably, as already threatened, the small portion of track laid, be torn up—for it will be observed that the prudent lender who Mr. Post says was to raise the money, did not reach Memphis until after information had been received there and published of the execution of the deed of trust. From which it will be seen that if the gentleman had been willing and able to raise the money on his arrival in Memphis, it could not have reached Texas much short of the middle of November, nearly one month after the execution of the deed of trust, and too late to avoid the disastrous consequences from which the company was saved by this act. The directory, on the

repeated assurances and promises that the money would be forwarded from New York, delayed the execution of the deed of trust to the very latest hour, which the safety of the company would admit, and as they had no power of looking into futurity, they could not foresee that the money would be forthcoming even by the 1st of November, and from previous disappointments felt assured that it could not be raised in any other mode than the one adopted by them.

2d. Mr. Post further says: “It appears by the records of the company, that the directors at a meeting in New Orleans, authorised the execution of a trust in order to raise \$30,000, and to secure to Messrs. T. J. Grant & Co., contractors, the amount due them for work done on the road.” Mr. Post then says that “the president proceeded to Texas, and executed a deed of trust not only for the purposes mentioned above, but to secure his own salary, and all debts of the company, classifying these debts in such a manner as he thought proper.” This is a substantial charge that I only had authority to execute this deed to raise the \$30,000 in money, and to secure Jno. T. Grant & Co's indebtedness, and that I, without authority, secured my own salary and the salaries of the officers, and other debts mentioned in the deed of trust. This charge is not true.

The records of the board of directors show that I executed the deed in all respects as I was authorised. The supplemental contract with Jno. T. Grant & Co., which is on record in the minutes of the board, (and to which Mr. Post had access,) stipulated that a deed of trust shall be executed to raise the \$30,000 to secure the Anderson debt, Union Bank debt, Jno. T. Grant & Co's debt, salaries of officers and other debts, in the manner therein stated; and a resolution was adopted by the Board, authorizing me to execute the deed of trust as set forth in this contract. I make no comments upon the above charge, the minutes of the board of directors prove it to be untrue.

But this is not all. I called a meeting of the board of Directors, in November, to lay this deed before them; I gave ample time for all to be present, and caused written notices to be sent through the mail to each director. At that meeting, Mr. Archer offered a resolution that the deed of trust should only be ratified as to the \$30,000, for materials, and to secure T. J. Grant & Co., and as to the balance of the debts, that it be disaffirmed. This resolution was voted down.

I will here observe that the money I obtained to finish the road was advanced on the condition alone that its payment should not be delayed beyond the 1st February; hence it was required to be set forth in the deed of trust, that if it was not paid by the middle of January, the property should be sold on ten day's notice, in order to realize the fund by the 1st February. It will, however, be seen, that the company had from the 19th October, 1857, (the date of the execution of the deed,) to 1st February, 1858, to raise the required sum. Subsequently the time was extended to the 1st April, (nearly six months,) and by an arrangement with the creditors only about \$50,000 was required at that time. But this amount not being raised, the creditors determined to submit to no further delay, and much to my regret, and without my knowledge, advertised to sell on the 1st June.

3d. Mr. Post states that in the month of April, 1857, I headed a subscription for myself and friends in Mississippi, for \$30,000,

that on the eve of my departure from New Orleans, I gave him a draft on my factors for \$5,400, that I afterwards wrote to him not to present it, and that I intended my salary, [save \$1,500 00 for traveling expenses,] for my subscription; that I wrote him a second letter, stating that I would take my salary in stock, and says, "yet we find in the trust deed his salary is secured, etc."

The facts stated by Mr. Post, *as far as they go*, are correct; but in candor and fair dealing he ought to have stated all the facts within his knowledge, connected with these transactions. This he has not done, and by withholding them has created a false impression.

In regard to the subscription of \$30,000 for myself and friends in Miss., I stated to Mr. Post, Mr. Bullitt and Mr. Brooks, at the time of subscription, that some friends in Mississippi desired to invest in stock to the amount of \$25,000 or \$30,000, but that I had no authority to subscribe for them—that I would put down that amount in that form, but not to be binding until I could see or hear from them, and that I would notify Mr. Post whether they consented or not.

About the 4th or 5th April, I left New Orleans, and the subscriptions were placed under the charge of Mr. Post. On my arrival in Vicksburg and Jackson, in consequence of various rumors about the large indebtedness of the company and other causes, (all of which I then believed unfounded,) these gentlemen changed their minds, and declined subscribing. On the 8th April I wrote to Mr. Post this fact. *I again wrote to him on the 13th April*, to have an accurate list of subscriptions made out, but to *leave out my conditional subscription for myself and friends*, stating also, that I would attend to my individual subscription when I saw him. I supposed, of course, after these letters, that this conditional subscription would be erased. I did not return to New Orleans until the subscriptions were closed, so that I could not erase it myself.

4. In regard to my salary, the following are the facts. I believed the stock of the company very valuable and intended to invest in it the amount of my salary. A resolution of the board was passed authorizing me to do so if I thought proper. As I was about leaving New Orleans, I saw Mr. Post. He requested me to give him a draft on account of my subscription. I told him I intended to take my salary in stock, but thinking at the moment that it would be immaterial, as I could draw my salary and meet the draft, I did make the draft to which he alludes. But shortly after, and whilst on the boat, I thought this draft might interfere with my other monied arrangements, whereupon I addressed Mr. Post a letter requesting him not to present the draft and that I would fill my subscription to the amount of my salary. Nothing, however, was done in this matter, nor was it adverted to, until the meeting of the board of directors in October, when the deed of trust was executed.

Shortly before leaving home to attend this meeting, an epidemic of unusual severity was raging on my plantation—my presence was absolutely needed there—my Overseer, who was engaged temporarily, was wholly inefficient—half my hands were down—many attending the sick and at one time not a single hand in the field. Six of them died and all things were in confusion. At this crisis I was telegraphed that my presence was demanded at my plantation. I had also been written to that it was necessary to go immediately to New Orleans to raise money to save

the Railroad from ruin. I had thus to choose between attention to my private affairs and the business of the company. Believing it to be my duty to sacrifice my own interests rather than the interests of the stockholders, I proceeded at once to New Orleans and from thence to Texas.

By a sacrifice of my professional business in part, of my time and in consequence of the epidemic, I was subjected as I believe to a loss of \$12,000 or \$15,000. Under these circumstances I stated to the directory that I thought I had lost enough, and would claim my salary in money, and would take only such part of it in stock as I thought proper. It was then understood that my salary was to be paid in money, and to be secured in the deed of trust.

At a subsequent meeting, the directory passed a resolution, that my salary should be paid as an ordinary money debt, leaving it optional with myself to take in part payment as much stock as I desired. I annex the preamble and resolution to that effect:

"WHEREAS, The President stated to the Board that he had written to Mr. Post promising to take \$10,000 of his salary in stock, and whereas subsequent events have altered his views in regard thereto, therefore, be it—

"Resolved, That the President's salary be paid to him as an ordinary money debt, with liberty to him to take in part payment thereof, so much of the five per cent. stock of this company as he may deem proper.

"NOTE.—Mr. Yerger did not vote on this resolution."

Why did not Mr. Post state these facts?

I took stock on which \$500 was paid and charged to me on account.

Although my salary was in the deed of trust, yet I never would have had the property sold to pay it. I wrote repeatedly to Dr. Fowlkes, that he should not be troubled about this matter, and told him to arrange and settle with others and there should be no difficulty with me. In fact I intended to wait until the company could conveniently pay it. After the road was advertised for sale, Dr. Fowlkes wrote to me wishing me to release it, I said to him, in a letter dated May 24, 1853:

"In regard to what is due to me, I have always told you I would wait any reasonable time, I care not how long that is, say two, three or four years. If, therefore, you can make any arrangements with the creditors, you can let the road stand security for my debt, and I will wait. If you buy the road you can arrange with my brother to let the road stand as security for its ultimate payment. All I want is that it may be secured, for my losses last fall in attending to the business of the road will not be more than repaid by this."

Again, Mr. Post says that I informed him, as did Col. Wigfall, that I assisted Col. W. in preparing the law, the object of which was to sell out the company. I did assist Col. Wigfall in preparing a law, by which, if the road had to be sold for these debts, the franchises—the land grants and Texas loans should also pass. As the law then stood, if the road was sold and bought in by *bona fide* stockholders, the property alone would pass and not the franchises, and if a sale became necessary, I was anxious to secure for *bona fide* stockholders to the exclusion of fraudulent ones, not merely the property, but the franchises of the corporation—and its right to the land grants—the Texas loan, etc. In the then existing state of things, if the debts were not paid, I believed that in order to protect themselves, the principal creditors would have to purchase it, and with a view to protect all *bona fide* stockholders against all contingencies. I got an agreement in writing

from the creditors—except Col. Wigfall—as before stated, that the property, if sold and purchased for them—or either of them, should be held in trust for bona fide stockholders, which agreement I have handed over to Dr. Fowlkes. And with a view to thus benefit them and to effect this object, I aided him in preparing the law.

It has been charged that the sole object in making this deed was to sell out the company. So far as I am concerned this is not true. The main and principal object, and it was a paramount one with me, was to raise money to save the charter and to secure the creditors. I had, however, another object in view. It was universally believed that frauds had been perpetrated at New York. I wrote to Mr. Post for information and for a statement of facts—but I received no answer. I requested Dr. Fowlkes to call on him and request him to write me fully. Dr. Fowlkes wrote me from New York that he had done so, and showed him my letter, and said that Mr. Post would write me—but still I got no answer. I wrote Mr. Post for the books. He was telegraphed again and again for them, but they were not sent, although near five months had elapsed since they were promised to be sent. Those facts and the quantity of stock offered in the markets, induced me to believe that fraudulent stock had been issued. I determined if there was such stock that the company should get clear of it. And it was my fixed determination to get clear of it, either by bill in equity or if the money due upon the deed of trust was not paid by the day stipulated, to sell the property under the deed of trust, and let it be purchased for *bona fide* stockholders to the exclusion of fraudulent ones.

I did not pretend to decide who were *bona fide* stockholders, but left that to be settled by a court of equity.

Thus, it will be perceived, my object was to save the charter by borrowing the money and securing it, and that done, not to let the property be purchased by speculators, but for *bona fide* stockholders. These were my objects, and I did every thing that was legal and proper to effect them.

Again—Mr. Post says, that at his instance all charges of fraud against the New York office were investigated, and that a report was made and widely spread, signed by the President, "by order of the Board," declaring it to be the unanimous opinion of the board that no fraud had been committed, etc. Mr. Post is mistaken in saying "all frauds charged against the New York office were investigated." The only thing investigated, was, whether since the organization of the company at New Orleans, the New York office had committed any frauds. The board was of opinion, and so was I, that no intentional fraud had been perpetrated by the Executive Committee at New York since the New Orleans organization, but we believed that it had acted unwisely and indiscreetly, and in a manner prejudicial to the company.

Mr. Post again says that the stock debts of Col. Wigfall and others were not at first secured in the deed of trust, but that it was recalled from the office to put them in. The facts are these. After I had made arrangements with Messrs. Scott, Henderson, Taylor, Hall, and others, to raise the money, and executed the deed of trust and sent it to the office, those gentlemen notified me that their agreement to raise the money depended upon the settlement of their stock debts—stating that if they were not settled, they would raise

no money, but let the charter go. After a good deal of warmth and much objection on my part, a compromise was effected by allowing them one third, subject, however, to the approval of the board of directors. The deed was then sent for and re-executed so as to include these debts. I reported these facts to the directory, and they ratified my action, upon the condition that the debts were to be paid in one, two and three years.

The statement that the trustees had written a letter promising not to sell under sixty days, is correct. In regard to the advertisement, I was surprised when I heard of it, as it was done without my knowledge or consent. I understand it was made by Benj. Long, a trustee who did not join in the above promise, and afterwards the other trustees joined in it.

The foregoing statements are substantially an answer to the charges contained in Mr. Archer's communication, with two exceptions, to-wit: 1st. That my brother-in-law, Mr. Scott, subscribed for stock, put the money in my hands, and that I returned it. 2d. That I did not have the like consideration for his nephew, but permitted him to take stock, etc. It is not true that Mr. Scott subscribed for any stock. He wrote to me to obtain for him 200 shares, and that so soon as I made the investment, he would remit the money. But shortly afterwards, and before I had any subscription, he wrote again, directing me to take no stock. Why Mr. Scott declined taking stock, I never knew until after the publication of Mr. Archer's communication. In a statement from Mr. Scott on this subject, he says: "I had learned from a correspondent in New York, that I could obtain stock in that city, at a very reduced price. The character of the stock, as represented by my correspondent, was as perfect as any that could possibly be issued by the road, or procured under a southern directory. This fact, together with rumors of northern frauds, induced me at once to desist from purchasing. I gave no reason for declining stock, nor were you cognizant of the circumstances which governed my action in the premise."

In regard to Col. Archer's nephew, he came to me with a letter from him, in which letter, Col. Archer stated he had advised his nephew to make the investment. This was on the 9th April; I then had confidence in the integrity and good faith of all connected with the management of the company, and the fact that Col. Archer was a director in the company, and recommended the investment, was calculated to increase that confidence. I therefore issued the stock to him, as I did at that time to all who desired it.

Before closing this communication, I think it proper to allude to a very singular resolution of the Executive Committee, of the 29th April, 1857, from which it will appear that said Committee authorised Mr. Post to "receive 13,333 shares of the five per cent. stock, in consideration of his agreement to surrender a contract made on the 16th October, 1856, by which he was authorised to purchase at his option, \$3,000,000 of the five per cent. stock of the company, at par. A reasonable man would have supposed that instead of paying Mr. Post about \$66,000 to surrender this contract, the interest of the company would have been decidedly promoted, by his adhering to the contract, and purchasing the stock. If Mr. Post had taken the \$3,000,000 of stock, and paid for it, \$150,000 would have been added to the means of the company, all diffi-

culties would have been avoided, and no occasion for the trust deed.

I have now, at much greater length than I desired, responded to the charges made against me. My efforts have been untiring to secure the success of this road. I opened negotiations with Geo. Peabody & Co., with a view to a future loan. I endeavored to procure a loan of \$120,000, in acceptance, from Brown, Brothers & Co., offering them, as I believed, ample security. I furthermore offered to become personally responsible to them for \$30,000 (part of the \$120,000) which I asked to be immediately advanced to finish five miles more, to secure the 256,000 acres of land. I said in regard to these acceptances, "I will individually pledge and bind myself to pay them when due, if the five miles of road is not finished before they become due." This was in addition to the \$10,000 for which I had already become responsible.

Whilst these things were being enacted, I was held in "high estimation" in New York, and received letters thanking me for my "influence," with eulogistic acknowledgments of my "valuable services," etc. But, lo! when money can not be raised, when I could no longer stay the hand of impatient creditors, these gentlemen, whose interest I had been promoting, condemn the board of directors and myself, and ignore acts which alone promised hope of the future success of the company.

It may be proper to add, that I was induced to favor the enterprise as one of a patriotic character, and submitted to remain in a condition uncongenial with my tastes, only at the earnest solicitations of others, who well know I would have resigned the Presidency long before I did, had I not deemed it an imperative duty to do all that I could to secure the interests of the whole company.

GEO. S. YERGER.

POSTSCRIPT.—Since writing the above, I have received the preamble and resolutions passed by the so-called "Meeting of the Stockholders," which from the paucity of its number, and the pompous and dogmatic style of its edicts or decrees, might more properly be called a "council of ten."

The invidious charge that either the late board of directors, or myself, were guilty of fraud in executing the deed of trust, from its absurdity and total want of truth, must rebound upon its authors.

In regard to the resolution charging me with a "sudden abandonment of the company"—"without presenting to the company any statement of its condition, any exhibition of its balance sheet, nor accounting for what monies, if any, were on hand." I will state that duties of a most sacred character prevented my attendance at the last meeting of the stockholders. My presence was not necessary, as a full report was made in December last, (I believe, by Mr. Post as chairman of the Committee,) of all receipts and disbursements up to that time. Since then there has been but a small amount received, (principally installments of stock,) which was disbursed by the Secretary, with the sanction of Dr. J. Fowlkes, who had this authority under his contract with the company. Moreover, I had in a letter to Vice President Post, resigned my office as President, as I had previously in December last, notified Dr. Fowlkes and others I would do, and repeatedly since.

In regard to the charge of my "known affiliation with those whose every effort was to force on said sale to their own benefit," I have this to say: If they mean by "affilia-

tion" that I have refused to denounce the just claims of creditors as fraudulent, or that for two weeks of unremitted exertion I negotiated with those creditors to postpone the sale, or that I refused in common with themselves to denounce the trust deed as void—believing then, as I do now, that the trust was fully authorised and perfectly valid, whatever may be said to the contrary, of the sale under it—or that I used every exertion to protect the interest of all *bona fide* stockholders, and particularly the New Orleans subscribers, with whose money the road was mainly built; or that finding all outside means failing, I called a meeting of the Directory to devise immediate action to prevent a sale,—and notwithstanding my personal solicitation to Mr. Archer and others to attend this meeting, which as they refused to do, there was no quorum present,—if by such action they mean affiliation, I acknowledge the justice of the charge.

But if they mean by "affiliation" that I associated myself with any man or body of men to do any thing unjust or illegal, they assert that which no man knowing me will believe, and which is absolutely false.

The said meeting also "resolved" that they had ample means to pay the debts of the company. It is unfortunate this fact was not sooner developed, as there would have been no occasion for the deed of trust, and the creditors could have been satisfied.

I append the resolution which was unanimously passed at a large meeting of the stockholders in New Orleans, in April last, which are in direct conflict with those passed by Mr. Post and his associates. It is for the public to judge which is entitled to most credit.

The Committee to whom had been entrusted the task of reporting on the liabilities of the company submitted the following report: NEW ORLEANS, May 12, 1858.

To the Stockholders of the Southern Pacific Railroad Co.: Your Committee, appointed on your behalf to confer with the creditors of the said road, now in this city, in order to ascertain the amount necessary to be raised in order to relieve said road from its present embarrassment, beg leave to report—

That it will require about \$250,000; and under existing circumstances your committee believe it utterly impossible to realize the amount, and could not at present advise further investment in said road; and in the event the same be sold, recommend that the stockholders throw themselves upon the liberality of the purchasers.

Your committee believe that your agent, the President, Geo. S. Yerger, has, upon all occasions, acted in good faith, and done every thing that he believed for your interest, and has the entire confidence of your committee.

All of which is respectfully submitted.

THOS. K. PRICE,
M. PILCHER,
GEO. M. PINKARD.

When the report was read, Mr. Fryor, of Tennessee, rose and moved that it be accepted.

Mr. Upton opposed the motion, and moved that the report be divided into two parts, the first of which, relating to the indebtedness of the Company, and the action of the stockholders thereon, be laid indefinitely on the table; and that the second part, endorsing Mr. Yerger's integrity and services, be adopted.

This motion prevailed, and was unanimously adopted.

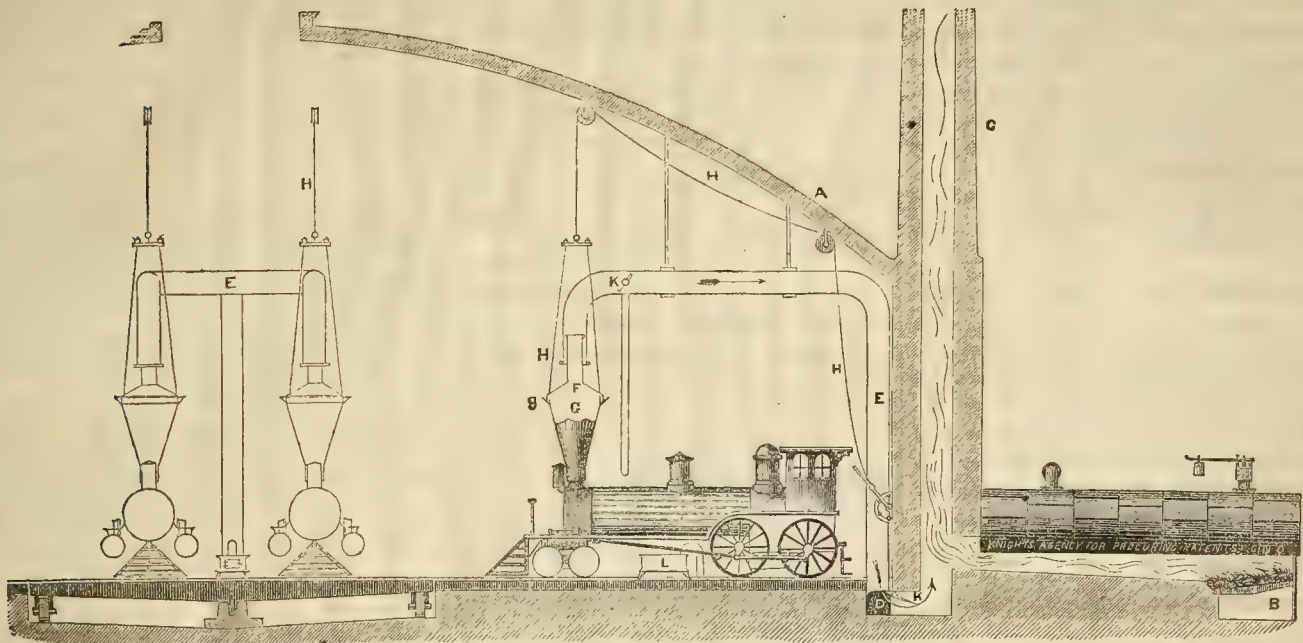
Not willingly, but from a sense of duty to myself, I have in the foregoing report been compelled to state and prove facts, which not only falsify the charges made against me, but reflect severely on the conduct of those who made them. This was unavoidable; and however I may regret the necessity which required me to do so, still I have the consolation of knowing that it was not of my seeking.

G. Y. S.

END OF A STRIKE.—After a strike, lasting four or five weeks, the miners of the Delaware and Hudson Canal Company resumed work on last Monday, for their former wages.

Lilly, Vancelair & Lilly's Arrangement for Carrying of Smoke from Locomotives in Engine Houses.

Patented February 28, 1858.



Above we give an engraving, representing a much needed improvement in engine houses. We have not only the theory as set forth in the accompanying description, but it has been thoroughly tested in the Round House of the Lafayette & Indianapolis railroad at Lafayette. It answers a most admirable purpose, keeping the house entirely free from smoke, and enabling them to keep an even temperature during the cold weather. The difficulty so often experienced of inability to raise steam, on account of insufficient draft, while the engine is standing in the round house, is entirely obviated by the use of this invention.

The cut represents an axial section of an Engine House, with stack C, and a stationary boiler B, attached.

A.—is a portion of the roof of the building

A flue D, underneath the floor, encircles the building and connects with the large stack C.

E.—are pipes which extend upward from the flue D, at suitable distances, (bifurcated or single, as is shown in the drawing,) each branch descends to within a short distance above the smoke stack of an Engine, so far as to permit the Engine to pass under, backing into its stall.

F.—is a short tube, (called "the hood,") resembling an inverted funnel; its stem being fitted to play up and down snugly within the depending portion of the pipe, and its mouth adapted to fit, (when the tube is lowered down,) around the rim of a locomotive chimney G., thus bringing the fire box and flues of the locomotive into connection with stack C. Rods and chords H, are attached and pass upward

and around pulleys, and thence to a lever attached to the wall or a post in the building, within convenient reach, by which the hood is raised and permitted to drop inside of the rim of the chimney G. The chimney G, is encircled with a flange I extending outward and upward to receive the lower rim of the hood F. The shell of the chimney inside of the flange I may be perforated with small holes to permit the return into the chimney of any moisture from condensation.

K.—are dampers or valves to close the pipe E, when not in use, and regulate the draft. The dampers nearest the hood may be made to open and close automatically by the upward and downward movements of the hood F.

L.—are stoves whose pipes also connect with the flue D, and are provided with dampers, so that the draft may be regulated at pleasure.

LA CROSSE & MILWAUKEE R. R.—The New York *Tribune* of Wednesday last, brings us the following information as to the financial plans of the La Crosse & Milwaukee R. R.

"We have it now officially from the Vice President of the La Crosse & Milwaukee Railroad, that the August interest on the Land Grant bonds of that road is provided, and the coupons will be duly paid. A committee has also been appointed, of which the Vice-President, Mr. Guest, is chairman, to take measures to arrange the floating debt and unsecured bonds, and clear the company from all its embarrassments. The committee propose to take a third mortgage of \$2,000,000, with which they are confident they can fund all the debts of the company not now secured by mortgage, including the "Barstow" bonds, the second mortgage land grants, the "corruption bonds" the bonds issued to the Watertown Railroad, &c., and the floating debt, the aggregate of all being about \$4,000,000. A large number

of the largest claimholders have already expressed their willingness to make the exchange. This will leave the road of 200 miles with a mortgage debt of \$8,000,000. Some compromise will afterwards be made with the stockholders so as to reduce the stock to \$1,000,000 or \$2,000,000. Mr. Chamberlain, the contractor, writes that the road will be completed to La Crosse, by the 1st of October, and the managers are very confident that then the earnings will be ample the first year to pay all the interest on the debt, and after the first year, leave something for the stock, which latter, however, is extremely doubtful.

✎ The President of the Winnebago Railroad, W. W. Lauman, has closed a contract for all the iron required to complete the first division of the road from Oshkosh to Ripton. The conditions of the contract are such as to leave the company in possession of all their first mortgage bonds, and nearly \$300,000 worth of town bonds.

MINNESOTA RAILROAD.—The Transit Railroad of Minnesota has been put under contract for seventy five miles, extending from Winona westward via Rochester. Thirty miles of the road are to be graded on or before the 1st day of January next, and seventy-five miles graded and fifty in running order on or before the 1st day of January next, and seventy-five miles graded and fifty in running order on or before the first of January, 1859.

OFFICERS OF THE MICHIGAN CENTRAL R. R. Co.—The following gentlemen were elected Directors for the Michigan Central Railroad Company, at the annual meeting held at Detroit.

S. W. Brooks, R. B. Forbes, Nathaniel Thayer, H. H. Hunnewell, H. H. Warden, of Boston; Erastus Corning, of Albany; D. D. Williamson, Thomas Tileston, of New York; Elon Farnsworth, Detroit.

BELLEFONTAINE RAILROAD.

The Eighth Annual Report of the Bellefontaine and Indiana, and the Ninth Annual Report of the Indianapolis, Pittsburgh and Cleveland Railroad Companies, like that of nearly every other road in the country, shows a falling off of the receipts, while there is not a corresponding falling off of expenditures. The business of the Bellefontaine and Indiana branch of this joint company for the year 1857, was as follows:

EARNINGS—From passengers.....	\$144,611 07
" freight.....	175,420 64
" mails.....	17,850 00
" express.....	10,270 12

Total.....	\$348,351 83
Working expenses.....	227,515 59

Balance.....	\$120,836 24
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It will thus be seen that the expenses are remarkably high, being sixty-five per cent. of the gross earnings. This the Directors undertake to account for on the hypothesis of the preponderance of the freight over the passenger business. If this is the cause, they had better remodel their tariffs so that no department of business shall be a tax on the other.

The balance of the earnings are thus disposed of

Interest on Bonds.....	\$91,227 50
Taxes on road.....	7,468 21
Balance net.....	22,140 53

	\$120,836 24
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It will thus be seen that no dividends were paid during the year.

The following is a comparison of the earnings with the year previous.

Earnings for year 1856.....	\$395,950 43
" 1857.....	348,351 83

Decrease in 1857.....	\$47,598 60
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—Which is divided as follows:	
On passengers.....	\$19,315 24
On freight.....	29,138 26
On express.....	5,170 10

Total.....	\$50,623 60
Increase on mail.....	3,025 00

	\$47,599 60
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The gross earnings of the road since its opening through business, July 1, 1853, have been as follows:

1853.....	\$100,442 98
1854.....	238,610 02
1855.....	298,293 57
1856.....	395,950 42
1857.....	348,351 83

The stock and debt account is as follows:	
1st mortgage bonds.....	\$791,000 00
2d ".....	137,000 00
Real estate ".....	176,000 00
Income ".....	199,500 00

	\$1,303,500 00
Capital stock.....	1,874,591 93

Total stock and bonds.....	\$3,177,894 93
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The amount of the floating debt is \$11,737 29, for which the company pay seven per cent. interest. They have reduced this department of indebtedness during the past year \$2,262 71.

The road has all been ballasted, with the exception of one mile; in this department of service the company has paid during the past year \$26,674.

In fencing, \$3,449 has been expended, and it is estimated to require \$10,000 more to make it complete. The cost per mile up to January, 1858, \$25,410 10. The road is built of compound iron, and will require considerable renewing during the present year;

it is the intention of the company to re-place about two hundred tons during the present year, this will be done by re-rolling the old iron, at a cost of about \$30 per ton.

On the Indianapolis, Pittsburgh and Cleveland branch, a corresponding decrease in earnings is also shown.

EARNINGS—From passengers.....	\$130,937 45
" freight.....	102,604 30
" mails.....	12,750 00
" express.....	7,227 00

Total.....	\$253,518 75
Transportation expenses.....	168,470 68

Balance.....	\$85,248 07
Interest and taxes.....	\$74,373 28
Balance net.....	10,874 69

It is thus seen that the working expenses amount to nearly sixty per cent.

A comparison of the gross earnings for 1857 with the previous year is as follows:

Earnings of the year 1856.....	\$296,845 61
" 1857.....	253,518 75

Decrease in 1857.....	\$43,326 86
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The gross earnings of the road, since its opening in July, 1853, have been as follows:

1853.....	\$90,553 32
1854.....	196,752 39
1855.....	226,058 64
1856.....	296,845 61
1857.....	253,518 75

The account of capital stock and bonds, on January 1st, 1858, stood as follows:

First Mortgage Bonds.....	\$556,000
Second ".....	159,000
Income ".....	166,000
Domestic ".....	34,800

Capital stock.....	\$1,015,800 00
	\$25,971 26

Total stock and bonds.....	\$1,851,771 26
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They have reduced their floating debt during the year \$49,095, and have added \$34,604 to their construction account, which, on January 1st, 1858, amounted to \$1,826,455 15, thus making their road cost \$21,743 65 per mile.

CINCINNATI STOCK SALES.

AT THE STOCK BOARD,
MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE

BY HEWSON AND HOLMES,

July 21, 1858.

BONDS.

\$10,000 Gov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	48
\$7,000 Little Miami R. R. Co. 6 per cent.	
1st Mort. Bonds.....	81½
\$5,000 Cin. Han. & Day. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	72½
\$2,000 Col. & Xenia R. R. Co. 7 per cent.	
Divid Bonds, due '60 & '61.....	90
\$6,000 Hamilton Co., Ohio, 6 per cent.	
Bonds.....	80
\$1,000 Medical College, Ohio, 10 per cent.	
Bonds.....	63
\$5,000 Indianapolis & Cin. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	73
\$2,000 Indiana Cent. R. R. Co. 10 per cent.	
2d Mort. Bonds.....	77½
\$1,000 Dayton & Western R. R. Co. 3rd Mort. 7 per cent. Bond.....	35
\$8,400 Certificates of Deposit in Ohio Life Ins. and Trust Co.....	31 to 32
\$1,300 Little Miami R. R. Co. Dividend Scrip.....	80 and 82

STOCKS

86 Shares Little Miami R. R.....	75
129 " Indianapolis & Cincinnati.....	35
79 " Columbus & Xenia.....	72
40 " ".....	73
10 " National Ins. Co.....	80
50 " Washington Insurance Co.....	100
15 " Farmer's Bank, Ky.....	115

MONETARY AND COMMERCIAL.

The same inactivity noticed in our last week's report still continues, and the counters of our bankers are burthened with currency. Rates continue about the same, prime paper from 8 to 12, while for other grades higher rates are charged, and great difficulty experienced in getting it done.

In Exchange there is, perhaps, less being done comparatively than in local business. There is no New Orleans in market while the supply of Eastern is superabundant.

The New York Courier and Enquirer of Monday, says:

There are no changes in the Money Market during the week to report, and much complaint is being made in regard to its dullness. The rates for money are the same as last week. First class paper from 3 to 5 per cent. Call Loans from 3 to 4 per cent.

The next Bank statement will show an increase of a million and a half in specie, without any corresponding change in Loans.

The following is a statement of foreign imports at New York for the week, and from Jan. 1, compared with the years 1856 and 1857:

	1856.	1857.	1858.
Dry Goods.....	\$2,065,109	\$5,348,103	\$2,203,843
General Merchandise.....	2,450,214	2,738,281	2,027,666

Total for the week.....	\$4,515,323	\$8,131,964	\$4,231,509
Previously reported.....	112,400 14	124,792 92	62,461 231

Total since Jan. 1.....	\$117,021,527	132,924,936	\$66,964,640
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The exports of specie have been:

For the week.....	\$ 637,240 09
Previously reported.....	13,724,421 08

Total 1858.....	\$14,561,661 17
Same time 1857.....	\$24,105,375 30

The Cleveland, Columbus and Cincinnati Railroad Company have declared a semi-annual dividend of five per cent., payable on and after the 2d of August.

The Joint Board of Directors of the Delaware and Baritan Canal and the Camden and Amboy Railroad and Transportation Companies have declared a semi-annual dividend of five per cent. on the capital stock, payable in New York and Philadelphia.

The earnings of the Erie Railroad for the month of June, 1857, were..... \$283,432 43

Earnings June, 1858.....	450,300 75
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Decrease.....	\$66,868 32
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The report of the June earnings of the Pennsylvania Railroad, is very favorable. The following statement shows the earnings of the Railroad, from all sources, for the month and since Jan. 1:

	Gross Earnings.	Expenses.	Net Earn'g.
June, 1858.....	\$398,006 03	\$274,897 04	\$123,108 99
June, 1857.....	371,753 27	276,913 79	94,839 90

Increase.....	\$26,252 76		\$28,269 09
Decrease.....		\$2,016 33	

Jan. 1st to July 1st, 1858.....	\$2,595,933 28	1,478,144 73	1,117,787 55
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Same period last year.....	2,576,453 86	1,643,550 92	932,502 94
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Increase.....	\$19,878 42		\$185,284 61
Decrease.....		\$165,406 19	

The revenue of the Baltimore and Ohio Railroad Co., for June, was as follows:

	Main Stem.	N. W. Virginia.	Wash'n Branch.	Total.
Passengers.....	\$55,527 86	\$2,053 63	\$27,193 61	\$85,677 10
Freight.....	287,694 65	18,282 23	10,937 77	316,914 65

	\$343,222 51	21,237 86	38,131 38	402,591 75
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Compared with the same month in 1857, these returns show the following result:

	Main Stem.	N. W. Virginia.	Wash'n Branch.	Total.
June, 1857.....	\$284,579 45		\$36,258 77	420,838 22
June, 1858.....	343,222 51	21,237 86	38,131 38	402,591 75

Decrease for June, 1858.....	\$18,246 47			
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Showing a decrease of \$41,356 94 for the main stem; an increase of \$21,237 86 for the Parkersburg branch; and of \$1,872 61 for the Washington branch; and a total decrease of \$18,246 47.

The receipts of this road for the nine months ending June 30th, were:

1856-7.....	\$3,610,471 43
1857-8.....	3,475,920 63

Decrease.....	\$334,550 80
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NORTH PENNSYLVANIA RAILROAD COMPANY.		
Earnings June, 1858.....	\$22,101 03	
Do June, 1857.....	23,656 58	
Decrease.....	\$1,554 45	
Earnings half year ending June 30th, 1858....	\$156,166 83	
Corresponding half last year.....	169,971 94	
Increase.....	\$16,494 88	

We have now to report a more active stock market, prices are firmer and sales are freer and fuller, at in some instances improved prices. The abundance of money seeking employment, together with the improving prospect of many of our railroad securities, are very naturally turning the attention of capitalists in this direction, which has resulted in increased sales.

We note among others, sales of \$10,000 Covington and Lexington 2nd mortgages at 48; Little Miami at 81½, Hamilton & Dayton 2nd at 72½; Indiana Central 10 per cent. 2nd mortgage at 77½. Also Hamilton County 6 per cent. Bonds at 80, and \$50,000 new issue 8 per cent at ½ prem, interest payable in New York. These Bonds are intrinsically as good as any State Bonds ever issued, and ought to have been taken at lower rates of interest. The issue was not large enough to attract the attention of heavy eastern capitalists.

We also note sales of the following shares; Indianapolis & Cincinnati R. R. at 35, Little Miami at 75, Columbus & Xenia 72 to 73.

Money continues in great abundance, and for undoubted paper, can be had on good terms; but for second and third rate signatures the rates are high and well maintained. Eastern exchange is abundant at ½ to ½ prem, with a very limited demand. New Orleans is very scarce with some few sales at ½ to ½ prem; St. Louis without change. Gold is very quiet with no sales except in a retail way. Business generally presents a more cheerful appearance. For grain, the late advices from Europe are regarded as very favorable, and will result in increased shipments abroad.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellows Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.

my8 No. 98 Pearl street, Cin'ti

TUBULAR RAIL.



surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
June 17.—1yr. **E. W. STEPHENS,**
Cincinnati Ohio.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pawa, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

W. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.
W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
no13 10 Wal ar Broadway, New York.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in a cases. ap 16

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF,

G. R. DYKEMAN, } Alton Ill.

O. W. CHILDS, Syracuse, N. Y.

J. S. MILLER, Litchfield, Illinois.

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. repairing attended to.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb3-tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

iy23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,
Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

oct29-6m

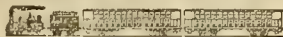
T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—

JAMES H. MORLEY, New York City.

OR SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

JAMES A. BOORMAN.

EDWIN A. POST.

RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

Bank of Commerce Building, N. Y.

Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.

feb5-ly

IRON BOILER FLUES
PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,
Manufacturers of

LAP-WELDED BOILER FLUES,
of 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

Warehouse, 209 South Third St.,

PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.,CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '66-2m.]

A. H. GOODMAN & CO.,
No. 7 Wall St., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited.

ALBERT BRIDGES,
Of the late firm of Bridges & Bro

JOEL C. LANE

feb4tr

NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Treasting B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging. 44 miles of Iron, 60 lbs. to the yard, with Chais, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.

W. B. MUNFORD, President.

Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market St.,
1 n24 NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

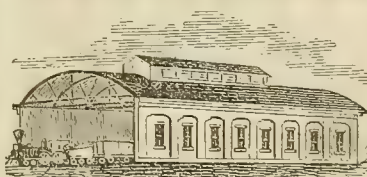
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

DAVENPORT....M.D. WELLMAN....C.M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16th JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c
Particular attention given to the superintending of
LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,
While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for
ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES
METALLIC SELF ADJUSTING CONICAL PACKING,
DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles
CHAS. W. COPELAND,
Consulting Engineer,

64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 228 H Street, Washington, D. C. apr12

GEO. D. WINCHELL & BRO.,

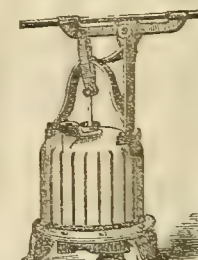
172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858,
Mar. 25, 1858.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

☞ FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

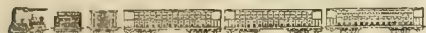
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.
E. J. PECK,
Supt Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatched Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank
Book Manufacturers,
43 Main St. Cincinnati, O.

1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th,
Corby, Gossin & Co.'s make, for sale very
low by
TRABER & AUBERG,
7 Public Landing.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

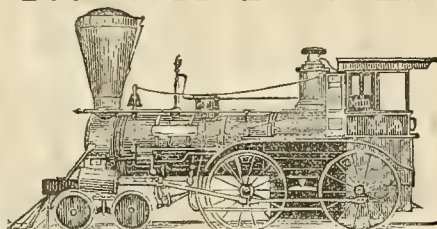
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent. my13

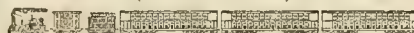
CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.
1858 1858.

CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO AND MISSISSIPPI (BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:30 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
jan8 ly 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburg and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

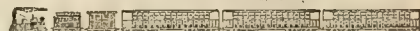
Leave Dayton at 8:05 A. M., 2:30 and 6:30 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

☞ A Steamer leaves Racine for Chicago every evening.

☞ Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
Robert Harris, Supt.
Racine, May 15, 1857. my21

WAREHOUSE
No. 5 FRONT STREET
Opposite Public Landing,
Cincinnati, O.

PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 3000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,
—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.
Blank Books of every description, with or without printed headings, got up on short notice.
ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

J. T. CRAPSEY,
ATTORNEY AT LAW,
OFFICE:

N. W. Cor. Walnut & Sixth streets,
May 21 CINCINNATI

SCHENECTADY
Locomotive Works,
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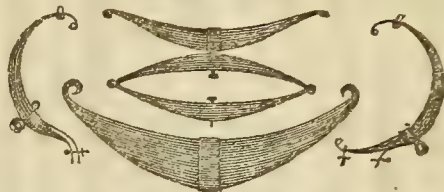
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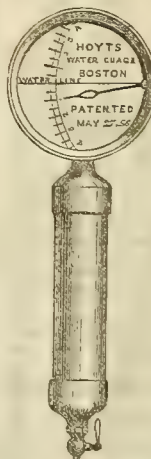
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THURSDAY MORNING, JULY 29, 1858.

Railroad Record

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THE PRESENT STATE OF RAILROAD BUSINESS.

There is a curious condition of Railroad traffic just now, which deserves some study, on the part of Railroad Managers.

Here and there a road has increased its receipts in the past year or two; but, taken in the aggregate, the gross receipts of railroads have not increased. For example, take the five great *arteries* which, in fact, test the traffic of all others, because all others communicate with them, and if the traffic of the tributaries were increased, their business would have been so. The four lines—the New York Central, the Erie, the Pennsylvania, and the Baltimore Road—have found their gross receipts *less* in the aggregate, than in the year previous. Now, this loss is not the gain of other, and new roads; but indicates the general fact of a diminished business. Now, why is this? Heretofore railroad traffic has steadily increased, and we believe will increase hereafter. But, why is it now diminished? Can it be that the commercial revolution has caused such a revolution in other

business? Or, are there other causes in the nature of things. We think, there are three leading causes, and these causes are of such a nature, as to be soon removed.

1. The first great cause is loss, and consequent economy brought to the great body of people, by the late commercial shock. One great effect was the diminished importation, and consumption of merchandise. The transmission of merchandise through the country, forms one large part of railroad traffic. But, this business is reduced nearly one-half in the country generally, and this must have been severely felt by many railroad lines. So also the consumption of many domestic articles, such as iron and furniture, has been diminished, and there is a reduction in the transportation of these.

Again, a partly forced and partly voluntary economy has been practiced by a large body of people, so that the traveling has been much diminished. Thus, the commercial revolution has had a great and wide influence on the business of railroads.

Another, and great cause has been the reduction in the *surplus* crops of the country. We know that many persons doubt this, and each year repeat their boasts of great crops; but the facts show otherwise—we mean *relatively*; for these supplies ought to show greatly increased quantities from year to year. It can not be disguised that the great West has not had so large crops to send off in the present year, as formerly. Nor has there been so much for several years. One cause of this, we have stated before, and is a prominent one in some respects. We mean the constant tendency of the people towards the cities, towns, the arts, and what is called enterprize; and which often means nothing but mere speculation. The result of this is a withdrawal of labor from agricultural pursuits. This process is constantly going on, and although concentrated in some degree, by the invention and use of agricultural machinery, has a sensible effect in reducing the relative amount of agricultural products.

Another cause of reduced receipts may be—and here we ask for information—the reduction of railroad *fares*. Have not railroads, in some cases, reduced their prices within a legitimate profit? We are in favor of *low* prices, but not in favor of *sacrifices*. We think that railroads, on a long line, will secure the greater part of the freights, at any fair price.

An inquiry should be made into the actual *precise cost* of carrying freight on any given railroad, and when that is ascertained, it should be put a little above that, and the result will be *some* profit, at any rate, however little business may be done.

In looking over the *causes* which we have stated for the diminished receipts of railroads, we perceive that in the ordinary course of

events, most of them must soon be removed.

1. Not only will money be abundant, but the movement of merchandise must soon recommence. Perhaps, the latter is, for the whole country, not desirable; but, whether desirable or not, the abundance of money will soon cause an active importation. The foreign trade will be revived, and the domestic consumption of articles be renewed, in all branches, so that the freights of roads will soon be greater than ever.

2. Crops have been below an average, but they can not remain so, without changing the course of nature. There is, as we said, a constant draw back on agricultural production, arising from the cause mentioned—the withdrawal of agricultural laborers for purposes of the arts and civic life. But this is a gradual process, and from the high price of many articles in cities, must soon, we think, be checked.

3. The price of freights is entirely within the control of the companies, and may be regulated by them. If they do not fix them, at living rates, it will be their own fault.

On the whole, we think, that a revival of railroad traffic must soon take place, and that, too, much beyond any thing heretofore seen.

RAILROAD LAW.

We adverted recently to some of the decisions of the Courts, in regard to the legal liabilities of Railroads. These decisions, undoubtedly, *stretch* the general rule, in regard to *liens*—carrying them not only to all property acquired *at the time* of the mortgage, but to *future acquisitions*; and not only to the actual fixed property, but to property movable and in *transitu*. That the general principle of a mortgage lien did not include such an extensive application is most obvious to all intelligent lawyers. But, after all, is it not in accordance with not only the spirit, but the letter of the mortgage liens upon Railroads? We believe the mortgages upon railroads, generally, express all the real, personal, and movable stock of the road, now, or hereafter acquired. Hence, the courts have the letter on their side; and, when properly considered, the spirit. For the general principles of mortgages are, that all things connected with them are mere *incidents* to the one principle of *securing the debt*. In the case of land, this is done, by the land alone; but, in the case of a railroad, it can not be done without including the whole machinery of the road, both real, personal, fixed, and moveable. This has one limitation, however, in the case of the *bien of the government*, for its resources, which, of course, is paramount to all others. This principle came up recently before Judge McLean, in the Circuit Court, sitting at Cleveland. The Sheriff of Tuscarawas county had seized a locomotive, and, perhaps, cars, on the Steubenville Road, for *Taxes due the State*. In this case, Judge

McLean was obliged to decide—although willing to go as far as possible for the protection of the road—that the lien of the State was *paramount to all others*. The reason is quite obvious. The State must be sustained for the protection of all interests. It can not be sustained without its resources, derived from taxation; hence, its *lien* for taxes is *prior* to all liens, and, therefore, paramount.

The Mortgagees of railroads, therefore, should take care that all taxes be paid, and all obligations to the State duly met; or, the machinery of the road may be attached, and thus the security of the mortgagees be impaired.

The general principle—now completely established by the Courts in reference to the rights of mortgagees and their relations to other parties, are these:

1. The Railroad, is a machine which is worth nothing—except its materials—unless in motion. But, this machine can not be kept in motion, without its locomotives, cars, station houses, wood, oil, etc., etc.

2. Hence, this machinery and materials can not be taken away, without destroying the value of the machine.

3. Hence, also, no general creditor, or subsequent mortgagee can be allowed to take away, under execution, any part of this machinery, as against the elder mortgage.

4. Hence, again, as wood, oil, and locomotives are used and worn out, they must be replaced, or the machine will cease to go; hence, the Courts have decided, that for its *necessary use*, the road may re-purchase these, and hold them.

5. And, lastly, the general principle is established, that the *Mortgagees—and relatively the eldest Mortgagees—are entitled, as against all general creditors, to hold all the moveable machinery and fuel of the road, now existent, and hereafter to be acquired, which is necessary to its proper use.*

This is a broad and easily understood principle. Taken in the spirit of railroad mortgages, it is right.

Looking now to the *priority of Liens* on railroads, we have this settled order, which, being of practical application, may be of use to some of our readers, interested in railroad securities. We state it clearly, that all persons may easily understand it.

1. The United States Government have a *priority* over all liens—even of States—for any claim it may possibly have.

2. State Government has a claim for its *taxes*, prior to all private liens of any kind.

3. The 1st Mortgagees have a lien, as against all subsequent lien holders. Next, the 2d Mortgagees, 3d, etc.; and lastly, general creditors.

4. The Mortgagees and specific Liens hold not only the present, and fixed property, but the personal and future acquisitions.

These being the general principles of Railroad Liens, it is easy to see, that in the present state of the law, the claims of *general creditors and stockholders* are absolutely worthless, as *against Mortgagees*. In roads, therefore, which are greatly embarrassed, or, in other words, where the 1st and 2d Mortgagees amount to the value of the road, there seems to be alternative against their final sale to Mortgagees, but such conditions as they may choose to impose. On the other hand, it is clearly not for the interest of Bondholders to sell out the road, when they have any other mode of securing the interest. Hence, on roads which may be made profitable in time, but, are not now, the bondholders ought unquestionably, for *their own interest*, to allow all reasonable advantages, such as time, and even the advance of capital, to complete and perfect them. Probably, this will be done in the case of most embarrassed roads.

One of the best things which could be done for railroads, would be for the Bondholders of these embarrassed roads to make a strict investigation of their merits. If they can be made profitable, they ought to assist in doing it. If not, it would be better to sell them out at once. It is no mercy to keep those which can not get along in a struggling existence.

GRAND TRUNK RAILWAY AND THE PACIFIC OCEAN.

While we Yankees are amusing ourselves with southern, middle, and northern Pacific railway schemes, we must take care, or Brother John, on the other side of the water, will extend his iron arms to the Pacific before we get fairly started.

As a beginning to this great work, he has already an unbroken track of 1,100 miles, extending from Portland and Quebec to Port Sarnia at the outlet of Lake Huron. This is the "Grand Trunk Railway," and has cost already upward of \$50,000,000, and it is now proposed to extend this line from Stratford, a point eighty-nine miles west of Toronto, to Vancouver on the Pacific, a distance of 3,000 miles.

The *Journal de l'Empire*, of Paris, gives the details of the movement in its present aspect. It seems that a great expedition is about to start from London, to be commanded by Col. Elliot, of the Royal Engineers, and composed of a company of sixty engineers and a troupe of forty men, under command of Capt. Haig. At Vancouver these will be joined by one hundred men who are to act as pioneers, selected from the most experienced and hardy servants of the Hudson's Bay Company. Then the expedition will make its surveys for the completion of the road.

This is certainly a very grand scheme, and one that is likely to be carried out; for already the Grand Trunk has been taken under the patronage of the Government, and has

received a grant of several millions of pounds sterling in consideration of extending its line from Quebec to Halifax, a distance of five hundred miles through a tract of country which is altogether valueless for commercial purposes as yet. This line is now under contract, and will be completed in the course of a few years, and the Grand Trunk will then present an uninterrupted line of continuous rail from Halifax to Port Sarnia—a distance of over thirteen hundred miles of the finest road in the world. "There can be no doubt, says a cotemporary, of the intention of the British Government to make this line a grand military cordon road, running through the whole of its northern possessions on this continent *via* the north shore of Lake Superior to Puget's Sound, and at the same time by grants of land to actual settlers, and by the removal of all restrictions upon emigration, to cause the tide of population to keep pace with the opening up and development of the country."

Such a road, of course, for many years, could not be a very profitable concern; but both the Imperial and the Provincial Governments desire it to be built for its political advantages, if for no other; and for this purpose the former especially is willing to guaranty the interest on the cost of construction, as it has already done in the case of the Grand Trunk Railroad, and this is inducement sufficient for capitalists to invest. Besides there must be an outlet somewhere for surplus English capital, which is ever ready whenever the glory or commerce of that country are likely to be benefited.

The effect upon our northern and western commerce by the construction of the proposed line of road will be very great, and in some respects prejudicial, though in the main vastly beneficial. We can not, therefore, subscribe to the opinion of the enthusiastic French writer to whom we have alluded, that Sarnia will soon take the place of Buffalo, and Montreal that of New York; "blotting out, commercially, both places from the high position they now occupy as trading cities." This will not be, though doubtless both may be interfered with in their growth, and take new relations—one to the trade of the country, the other to that of the world.

At Port Sarnia the Grand Trunk will probably take up, for the benefit of Canada, a trade which formerly went to Buffalo, and which, in 1855, is said to have amounted to sixty millions sterling—a rather large estimate—the withdrawal of which is already seriously felt by the lake and river interests. But in return by opening up the vast regions lying between the great lakes and the Pacific—embracing some of the finest lands in America, and by turning a large portion of European and American trade with Asia through this channel, the railway and com-

mercial interests of the northern and western States must be greatly and permanently benefited.

The above plan seems to be very complete and comprehensive, and if carried out, as no doubt it will be, it will produce a wonderful change in Canada, and make it, what it long since should have been, an independent empire; while most of our railways extending northward, especially those stretching off in the direction of St. Paul, will be benefited to an extent not easily estimated. Let the road be built we say.

BOILER EXPLOSIONS.

CINCINNATI, July 28, 1858.

EDITOR RAILROAD RECORD:

Sir.—I noticed in your paper of week before last, a long article on the subject of steam boiler explosions; and at the close of it you referred to an article in the *Cincinnati Gazette* of the 14th inst., by Mr. Harshman of Dayton. The gentleman makes a sweeping assertion, when he comes out and says boilers do not explode by an excess of pressure, nor by overheated surfaces, or careless management, or any other of the causes which heretofore actuated such explosions. This is just saying that all our operations and observations have been of no use to us or the public, and that now we do not know anything about the steam boiler. I should be exceedingly obliged to Mr. Harshman if he will prove his assertion; it is a fact, if he could do so, I would have no objections to admit, publicly and privately, that I never had any knowledge on the subject. If so great a public calamity as boiler explosions could be avoided by such simple means, certainly I should be glad to welcome it into use. No one would do more to bring about such a result than I. Now, I do not wish to ridicule the gentleman's theory because he can not explain it satisfactorily; I am aware that many things are now in use, and work well, and are perfectly controllable, but the man has not yet lived who could explain the reason why or how it is so. This may be one of those things; but in order to prove it positively by experimental demonstration, on a scale that can not fail to satisfy all, I want Mr. Harshman to put up a boiler of the regular size, some twenty or thirty feet long, set in the usual manner, in any of the locations where these eternal humbugs prevail to the greatest extent, and after getting it to work to the best of his ability, let me or some one else who knows how to explode a boiler, put it in a condition to explode, and if we fail, then the theory you set forth is entitled to some weight.

Those little experiments, on a miniature scale, do not satisfy any one acquainted with the workings of the steam boiler. Any subject so capable of practice as that, should be

tried experimentally. Come out, sir, and let us see what you can do, practically. The fuel which you pretend to be able to save, also demands an explanation.

Yours, respectfully,

A. B. LATTA.

We understand from Mr. Latta that if Mr. Harshman, who is a gentleman of but limited means, is desirous of testing his theory on a large scale, as is suggested in the letter of Mr. Latta, that there will be no difficulty on the score of expense, there being plenty of boilers that can be obtained for the purpose, without cost to Mr. H.

NORTHERN ROUTE TO THE PACIFIC.

At the request of parties residing in Minnesota, we, with pleasure, give space to the proceedings of a meeting at St. Paul, Min. The report made by Mr. James W. Taylor, the late Ohio State Librarian, is full of interesting facts, and we regret we have space only for a part of it. Mr. Taylor has devoted a great deal of attention to the physical features and geography of our unsettled territory, especially in the North West, and is, perhaps, more competent to make an intelligent report on this subject than any other man in Minnesota. The developing of the rich placers of Frazer and Thompson's Rivers, and Vancouver Island, will draw the attention of emigrating parties to the northern overland route.

FRAZER RIVER GOLD MINES.

OVERLAND ROUTE THROUGH MINNESOTA AND THE SASKATCHEWAN VALLEY—PUBLIC MEETING AT ST. PAUL.

An adjourned meeting of citizens of St. Paul and of citizens of Minnesota sojourning in St. Paul, was held at the Fuller House on Wednesday, July 7, at 8 o'clock, P. M. Col. Wm. H. Noble, of St. Paul, resumed the chair, and Hon. E. Pierce, of St. Peter, was appointed secretary.

Mr. James W. Taylor, from the committee previously appointed, presented the following report upon the general subject of an overland route and the natural features of the region connected with it:

GEOGRAPHICAL REPORT.

It is now established that a district of British Oregon, holding a relation to Puget Sound, similar to that of the Sacramento valley to the Bay of San Francisco, contains rich and extensive gold placers.

The upper waters of Frazer river, including its principal tributary, Thompson river, are eagerly sought by adventurers from Oregon and California, and all accounts concur that the surface minings are as successful as those of California and Australia have been. Geologists have anticipated such a discovery, and Governor Stevens in his last message to the Legislative Assembly of Washington Territory, claims that a district south of the international boundary is equally auriferous.

The Frazer river mines have already been mentioned in the British Parliament, as not less valuable and important than the gold fields of Australia; and it is in view of the

influence of these events upon overland emigration that the present report is submitted.

The southern boundary of Minnesota is in latitude $43\frac{1}{2}$ deg. north. St. Paul and the Falls of St. Anthony are about 45 deg., and our northern boundary, coterminous with the international line, is partly on the parallel of 49 deg. The Frazer river mines will probably be explored from latitude 49 to 55 deg.; therefore if an overland emigrant route thither is practicable from Minnesota, it will be an important consideration in favor of such a route, that the valleys of the upper Mississippi and the Red river of the North are on the most direct line of communication from Canada and the States north of lat. 40 deg., to the Frazer river district.

An overland route through Minnesota, ascending the course of the Saskatchewan and crossing the Rocky Mountains in latitude 54 deg. to British Oregon, would traverse a region of North America hitherto withheld from colonization, but soon to be surrendered by the Hudson Bay Company for civilized settlements. West of the Rocky Mountains, that Company claims no chartered rights, and their license of Indian trade will expire in May, 1859. The British Parliament have just published a Report of a Select Committee of the House of Commons, which exhibits a disposition on the part of the Company to withdraw from an immense district, reaching west of Lake Winnipeg to the Pacific, if thereby a recognition of the exclusive privileges hitherto enjoyed by them within the remainder of their chartered limits can be obtained. Even such a compromise is vigorously opposed by the people of Canada, but the citizens of Minnesota would have reason to be satisfied if our North-western connection with Assiniboia, Saskatchewan and British Oregon should be placed on the footing of such an adjustment. In this respect our interests are identical with the inevitable policy of Great Britain. Henceforth, no other relation than "Reciprocity" is possible between British America and the adjacent States of the American Union. Minnesota, especially, welcomes the assurance that Victoria, the capital of Vancouver Island, is to be selected as the naval station of England, on the Pacific—perhaps to become, under the influence of an international railroad, the Liverpool of the Pacific coast.

As to the "adventurers of England trading into Hudson Bay," (so the stockholders of the Company are technically called in the charter of incorporation,) they can turn their partial defeat into a victory. The map of Arrow-smith exhibits their posts at every advantageous locality between the Lakes and the Pacific, and between latitudes of 49 deg. and 56 deg. Open that immense belt of country to European and American colonization—extend over it the benefits of reciprocity—adopt the American system of land surveys, and land bounties, to settlers, and the members of the Hudson Bay Company would receive more advantage in ten years as proprietors of cities and towns, than would be possible for them as fur traders in a century.

The press and citizens of St. Paul have observed with much satisfaction the progress of public opinion in England on this important subject. Encouraged by the London Geographical Society, if not by the Government, Capt. Pallisser leads an exploring party to the sources of the South Saskatchewan, and the passes westward through the Rocky Mountains. Col. Elliott, at the head of fifty

engineers and as many soldiers, has recently arrived at Vancouver Island, and, accompanied by a hundred voyagers, will thence move eastward through British Territory, definitely locating a Railroad route as he advances. Simultaneously, a joint commission of the American and English governments are engaged in running the international boundary from Puget Sound to Lake Superior, commencing at the Pacific terminus. And now comes the gold discovery of the North-west, which will probably renew, in that direction, the wonderful history of California and Australia.

An overland route from St. Paul, on American Territory to Puget Sound, or through the Saskatchewan basin to Frazer river and Vancouver Island, is central to an immense and fertile area, which, at no remote day, must connect with the channels of the Mississippi and the St. Lawrence, within the limits of Minnesota. From latitude 44 to 54, and from longitude 92 to 112 (west of Greenwich,) or between Lake Superior and Winnipeg on the east, and the Rocky Mountains, there is comprised an area of 631,050 square miles. Extend these lines of latitude to the Pacific, in longitude 124, and we have a further area 378,636 square miles, or an aggregate of 1,009,686 square miles, equal in extent to France, Germany, Prussia, Austria, and that portion of Russia which lies south of St. Petersburg and west of Moscow. A district 10 deg. of latitude wide by 32 of longitude in length, would comprise twenty-four States of the size of Ohio.

Our present inquiry, however, is confined to the upper half of this vast region, or exclusively north of the boundary of 49 deg.; and since an emigrant route to Frazer river is under consideration, a general view of the districts to be traversed by such a route, or closely connected with it, will first be presented. Those districts of British America west of the Lakes, which by soil and climate are suitable for settlement, may be thus enumerated:

Vancouver Island.....	16,200 sq. miles.
Frazer and Thompson Rivers.....	60,000 "
Sources of the Upper Columbia.....	20,000 "
Athabasca District.....	50,000 "
Saskatchewan, Red River, Assiniboin, etc.....	360,000 "
Total.....	506,200 "

Under these geographical divisions, whose area would constitute twelve states of the size of Ohio, we propose to give the results of a Parliamentary investigation, just published, into the affairs of the Hudson Bay Company, so far as they are descriptive of the foregoing districts:

VANCOUVER ISLAND.

This Island is fertile, well timbered, finely diversified by intersecting mountain ranges and small prairies, with extensive coal fields, compared by one witness to the West Riding of Yorkshire coal, and fortunate in its harbors. Esquimault harbor, on which Victoria is situated, is equal to San Francisco. The salmon and other fisheries are excellent, but this advantage is shared by every stream and inlet of the adjacent coast. The climate is frequently compared with England, except that it is even warmer. The winter is stormy, with heavy rains in November and December; frosts occur in the lowlands in January, but seldom interrupt agriculture; vegetation starts in February, rapidly progressing in March, and fostered by alternate warm showers and sunshine in April and May, while intense heat and drouth are often experienced during

June, July and August. As already remarked, the Island has an area of 16,200 square miles, and is as large as Vermont and New Hampshire.

FRAZER AND THOMPSON RIVERS.

Northward of Vancouver Island, the coast range of mountains trends so near the Pacific as to obstruct intercourse with the interior, but "inside," in the language of a witness, "it is a fine open country." This is the valley of Frazer river. Ascending this river, near Ft. Langley, "a large tract of land" is represented as "adapted to colonists;" while of Thompson river, the same witness says that it is "one of the most beautiful countries in the world"—"climate capable of producing all the crops of England, and much milder than Canada." The sources of Frazer river, in latitude 55 deg., are separated from those of Peace river, (which flows through the Rocky Mountains, eastwardly, into the Athabasca,) by the distance of only three hundred and seventeen yards.

SOURCES OF THE COLUMBIA.

A glance at the map will show how considerable a district of British Oregon is watered by the Upper Columbia and its tributary, the McGillivray or Flat-bow river. It is estimated above as 20,000 square miles, and has been described in enthusiastic terms by the Catholic Bishop of Oregon, De Smet, in his "Oregon Missions." The territory of the Kootonais Indians would seem, from his glowing description, to be divided in favorable proportion between forests and prairies. Of timber, he names birch, pine of different species, cedar and cypress. He remarked specimens of coal, and "great quantities of lead," apparently mixed with silver. The source of the Columbia seemed to impress him as "a very important point." He observe that "the climate is delightful"—that the extremes of heat and cold are seldom known, the snow disappearing as it falls. He reiterates the opinion "that the advantages nature seemed to have bestowed on the Columbia, will render its geographical position very important at some future day, and that the hand of civilized man would transform it into a terrestrial paradise."

It is an interesting coincidence that Father De Smit published in a St. Louis paper a few months since, a similar description of this region, adding that it could be reached from Salt Lake City along the western base of the Rocky Mountains with wagons, and that Brigham Young proposed to lead his next Mormon exodus to the source of the Columbia River. Such a movement is not improbable, and would exhibit far greater sagacity than an emigration to Sonora.

Already the Mormons have established a flourishing half-way post on the Salmon river (a branch of the Columbia,) and as De Smet has had many opportunities for ascertaining the designs of the Mormon hierarchy, the next scene of their zeal and industry may be under the protection of the British Crown.

THE ATHABASCA DISTRICT.

The valleys of the Peace and Athabasca rivers, which occupy the eastern base of the Rocky Mountains from latitude 55 deg. to 59 deg., share the Pacific climate in a remarkable degree. The Rocky Mountains are greatly reduced in breadth and mean elevation, and through the numerous passes between their lofty peaks, the winds of the Pacific reach the district in question. Hence it is,

that Sir Alexander Mackenzie, under date of May 10th, mentions the "exuberant verdure of the whole country"—trees about to blossom and buffalo attended by their young. During the late Parliamentary investigation, similar statements were elicited. Dr. Richard King, who accompanied an expedition in search of Sir John Ross, as "surgeon and naturalist," was asked what portion of the country he saw was available for the purpose of settlement. In reply, he described as a "very fertile valley," a "square piece of country" bounded on the south by Cumberland House, and by the Athabasca Lake on the north. His own words are as follows: "The sources of the Athabasca and the sources of the Saskatchewan include an enormous area of country. It is in fact, a vast piece of land surrounded by water. When I heard Dr. Livingston's description of that splendid country which he found in the interior of Africa within the equator, it appeared to me to be precisely the kind of country which I am now describing.

* * * It is a rich soil interspersed with well wooded country, there being growth of every kind and the whole vegetable kingdom alive." When asked concerning mineral productions, his reply was, "I do not know of any other minerals except limestone; this is apparent in all directions. * * * The birch, the beech and the maple are in abundance, and there is every sort of fruit." When questioned further as to the growth of trees, Dr. King replied by a comparison "with the magnificent trees round Kensington Park in London." He described a farm near Cumberland House under very successful cultivation—"luxuriant wheat"—potatoes, barley, pigs, cows and horses.

THE SASKATCHEWAN, ASSINIBOIN AND RED RIVER DISTRICT.

The area of this Continent, Northwest of Minnesota, and known as the Saskatchewan district, is estimated by English authorities to comprise 368,000 square miles. North-west from Otter Tail Lake, the geographical center of Minnesota, extends a vast silurian formation, bounded on the West along the eastern base of the Rocky Mountains by coal measures. Such a predominance of limestone implies fertility of soil, as in the north-western States, and the speedy colonization of Saskatchewan would be assured, if the current objection to the severity of the climate was removed.

Mr. Blodget claims that not only all the vicinity of the south branch of the Saskatchewan is as mild in climate as St. Paul, but that the north branch of that river is almost equally favorable, and that the ameliorating influence of the Pacific through the gorges of the Rocky Mountains is so far felt on Mackenzie's river, that wheat may be grown in its valley, nearly to the 65th parallel.

The foregoing details have been produced to exhibit the general features and advantages of the country which extends between Minnesota and the Gold Regions of the North Pacific. It now remains to arrange the facts relative to the journey thither by the route of Pembina and Saskatchewan.

The journey from St. Paul to Pembina is familiar to all. From Pembina to the junction of Mouse river with the Assiniboin, there is a well defined track over a plain, such as Sir George Simpson describes on the way to the same point from Fort Garry. "On the east, north and south, there was not a mound or a tree to vary the vast expanse of green sward, while to the west, (it would be

to the north of our advancing party,) were the gleaming bays of the Assiniboin, separated from each other by wooded points of considerable depth."

Gov. Simpson, with relays of horses, made the journey to Carlton House in thirteen days, about forty-six miles per day.

Bow river, on the south branch of the Saskatchewan, says Simpson, "takes its rise in the Rocky Mountains near the international frontier, and is of considerable size, without any physical impediment of any moment."

* * * At the crossing place the Bow river was about a third of a mile in width, with a strong current, and some twenty miles below, falls into the main Saskatchewan, whence the united streams flow toward Lake Winnipeg, forming at their mouth the Grand Rapids of about three miles in length."

A smart ride of four or five hours from the Bow river through a country very much resembling an English Park, brought the party to Fort Carlton on the Saskatchewan—latitude 53 deg., longitude about 108.

"The Saskatchewan," Gov. Simpson remarks, "is here upward of a quarter of a mile wide, presenting, as its name implies, a swift current. It is navigable for boats from Rocky Mountain House, in longitude 116, to Lake Winnipeg, upwards of seven hundred miles in a direct line, but by the actual course of the stream, nearly double that distance. Though, above Edmonton, the river is much obstructed by rapids, yet from that Fort to Lake Winnipeg, it is descended without a portage alike by boats and canoes, while even on the upward voyage, the only break in the navigation is the Grand Rapid, already mentioned."

After forty-eight hours at Fort Carlton, Gov. Simpson's party resumed its journey along the north or left bank of the Saskatchewan, and reached Edmonton House in five days. In the vicinity is an extensive plain, covered with a luxuriant crop of the vetch, or wild pea, almost as nutritious a food for cattle and horses as oats. The Saskatchewan here is nearly as wide as the Carlton, while the immediate banks are well wooded, and the country beyond consists of rolling prairies. Coal is also found in its banks.

Gov. Simpson's further route was along the eastern base of the Rocky Mountains, to the sources of the Bow river or South Saskatchewan, whence he crossed to the head waters of the McGillivray, or Flat Bow River. He left his carts at Edmonton, making the journey to Fort Colville, with pack horses; but a party destined to Frazer and Thompson rivers, would find a direct route, but not for wagons, through the Athabasca Portage to the Boat Encampment on the Upper Columbia. This Pass is between Mount Hooker and Mount Brown, and on its divide a small lake, called on some maps "Committee's Punch Bowl," sends its tribute from one end to the Columbia, and from the other to the Mackenzie.

A witness before the Parliamentary Committee, Mr. John Miles, states that from the Boat Encampment it is "two days' level walk" on the head waters of the Columbia before reaching the mountain—"a good day's walk and hard work too," to reach its summit, and three days' before getting out of the mountain ridge altogether. It seems reasonable to suppose from this testimony, that a party might traverse the Rocky Mountains from Edmonton House to the head waters of Thompson river in about twelve days.

The committee compute the distance from Saint Paul to the eastern border of the gold mines to be 1,650 miles, as follows:

St. Paul to Pembina.....	450 miles.
Pembina to Carlton House.....	600 "
Carlton to Edmonton.....	400 "
Edmonton to Thompson River.....	300 "
Total.....	1,650 "

They estimate, in view of the facilities afforded by the face of the country, and a continuous line of Hudson Bay Company's posts, that this journey can be accomplished in seventy days.

What outfit will be requisite, and the facilities for supply at St. Paul, will be the subject of another report.

Respectfully submitted.

On motion, the foregoing report was accepted and adopted.

Col. John H. Stevens of Glencoe, presented the following report:

BUSINESS REPORT.

The distance from St. Paul to the gold mines of Frazer and Thompson rivers may be put down as follows:

St. Paul to Pembina.....	450 miles.
Pembina to Carlton House.....	600 "
Carlton to Edmonton.....	400 "
Edmonton to Boat Encampment.....	150 "
Boat Encampment to Thompson River.....	50 "

Making a total distance of.....1,650 miles from St. Paul.

The Committee have made the following estimate of the expenses necessary to equip and fit out a party of ten from St. Paul. The have included in the estimate sufficient food for six months:

Ten bbls. Flour—cost, \$4 per barrel.....	\$ 40 00
Five " Pork— " \$18 "	90 00
450 lbs. Sugar— "	54 00
40 lbs. Tea—cost, 60 cts. per lb.....	24 00
Sundries.....	100 00
Powder and Lead.....	100 00
Ten Pairs Blankets.....	100 00
Goods and Implements.....	100 00
Teams and Vehicles.....	1,200 00

Total cost.....\$1,808 00

The foregoing report was accepted and adopted.

Hon. Martin McLeod presented the following resolutions, which were unanimously adopted:

RESOLUTIONS.

Resolved, That the Overland emigration to British Oregon, attracted by the Gold Discovery on Frazer and Thompson Rivers, will find Minnesota the most desirable point of departure and supply for the following reasons:

First. The emigrant has a choice of three routes far more easy and direct than any south of St. Paul, to-wit: (1.)—By Pembina, Carlton, Edmonton, Athabasca, Portage, and the Boat Encampment of the Columbia. (2.)—By the South Saskatchewan and the Kootenais Pass to Fort Colville; and (3.)—By Gov. Stevens' well known Railroad route on the American side of the international boundary.

Second. Either of these routes has more water, timber, and game, and is less difficult than those which start from the Missouri river.

Third. Supplies of all kinds are very cheap in Minnesota.

Fourth. Faithful guides and attendants are easily obtained on our frontiers and in the Territory of the Hudson Bay Company.

Fifth. There is no danger of molestation from Indians on these northern routes.

Resolved, That the citizens of Minnesota will join heartily with the people of Canada in the policy of colonizing the Western Districts of British America, which is about to be established; and that relations of Reciprocal Trade with the United States, if not now existing, should be extended over that region of North America.

Resolved, That our citizens be urged to encourage the formation of parties over either of the routes above designated.

A committee consisting of Messrs. Martin McLeod, Norman W. Kittson, A. F. McDonald, Alexander Ramsey and R. G. Murphy was appointed, and requested to report at an adjourned meeting to be held at the hall of

the House of Representatives, on Saturday, July 10, at 4 o'clock p. m., upon the relations of the Red River settlements to Minnesota, the nature and extent of their commerce with our citizens, and the facilities thereby afforded for an overland communication with British Oregon.

After remarks by Messrs. McLeod and Stevens, the meeting adjourned to the hall of the House of Representatives, on Saturday, July 10, at 4 p. m.

WM. H. NOBLE, *Chairman*.

E. PIERCE, *Secretary*.

SOUTHERN PACIFIC RAILROAD.

At the request of the President, Dr. Jephtha Fowkes, we publish in an Extra, for the benefit of the Stockholders and others interested in the Southern Pacific Railroad Company, the opinion of Messrs. Jennings, Adams, and Murrah, in relation to the Trust Deed and the sale under it, on the 1st of June, ultimo, of the property and franchises of that incorporation. It will be seen that they regard the whole proceedings as a nullity, and that the purchasers under that sale have acquired no legal or equitable rights to the property in question. These gentlemen are among the most eminent lawyers in Texas.—*Texas Republican*.

OPINION.

In the matter of the execution of the Deed of Trust, on the 19th of October, 1857, by Geo. S. Yerger, as President, of the Southern Pacific Railroad Company, and the sale made on the 1st Tuesday in June, 1858.

We are of the opinion that the Deed of Trust is illegal and void, and that no title has passed by the act of sale.

There is no grant of power, conferred by the act of incorporation, authorising the company to mortgage the franchise.

The Franchise and Corporate rights of the Company and the means vested in them are necessary to the existence and maintenance of the object of its creation, and are incapable of transfer or sale. *Canal Company vs. Bonhom*, 9th Watts and Serg 27; *Angell on Corporations* 185; *Iredell Reports* 5th Vol., p. 306.

The act of the 19th December, 1857, entitled an act, supplementary to and amendatory of an act, to regulate railroad companies, approved 7th February, 1853, does not include the Deed of Trust. Statutes are not to be construed to have a retrospective effect, unless the terms are explicit. *Plumb 2, Sawyer 21, Conn. 351*. Our Constitution prohibits such acts and when they effect previous vested rights, they are void.

The act of December 19, 1857, declares "That every Railroad Company shall have power to make by-laws as they may think proper for the government of the Company, and that it shall require a vote of a majority of not less than two-thirds of the stock of the company to establish such by-laws, and no company shall have power to make any trust deed or mortgage on the franchise or property of the company, unless the power is expressly given by the by-laws of the company." We are clearly of the opinion, the Directors could not authorise the President to execute a Deed of Trust on the franchise and property of the company, in the absence of a by-law passed expressly for such purpose, and that no act of the company in such absence of or without such by-law, having been first enacted

ed, can operate as a recognition or affirmation of such deed of trust.

The fifth section of the act of incorporation declares that all conveyances and contracts in writing executed by the President and countersigned by the Secretary or any other officer or person authorized by the Directors, under the seal of the company, and in pursuance of a vote of said Directors, shall be valid and binding. This deed was signed by the President only and is void. The mode prescribed for the execution of the instrument essential, Vide Angell on corporations, page 101; 2d Cranch 127; 2d Johnson's Reports 114; Powell on powers 88 9; 2d Bac Abr. Title corporation, page 452. Yerger had no right to prefer creditors under the resolution authorizing the execution of a deed of trust. This he has done.

He had no authority to recognize the stock claim of Hall, Wigfall, Scott, and others, and by agreement to convert the same into a money demand against the company, and mortgage the franchise and property of the company, to secure the payment of the same, this is prejudicial to the rights of creditors and the stockholders.

No act of the Legislature becomes a part of the original act of incorporation, unless the same be adopted by the company as part of their act of incorporation. This act of Dec. 19th, 1857, not having been adopted by vote or resolution, passed by the Company previous to the sale, the Deed of Trust and sale can not in any manner be cured by the same.

We think the facts connected with the execution of the Deed of Trust, and of the sale render both void, as against creditors and stockholders.

(Signed,)

C. M. ADAMS,
P. MERRAH,
D. S. JENNINGS.

OFFICE OF THE S. P. RAILROAD CO.,
Marshall, Tex., July 1st, 1858.

To the Editor of the Texas Republican:

As much misapprehension prevails, here and elsewhere, as to the regular adjourned meeting of the Stockholders of this Company, at New Orleans, on the 2d June last, we deem it to be a duty to Texas, whose grants, and to the stockholders whose money, constitute the means for building the road, to state the facts connected with that proceeding.

In conformity to the adjournment of the stockholders in December last, to meet early in May, and in pursuance of a subsequent By-Law, the stockholders were notified by a published card of the Secretary of the Company, to meet at their Office in New Orleans, on the 2d of June, between the hours of 12 and 2 p. m. This meeting occurred at the time and place designated. More than half the stock of the Company was represented on the first day. Col. Archer, the Chairman of the meeting in December, was the regular presiding officer, and signed each day's proceedings. At the election of Directors, more than two-thirds of the stock of the Company was represented, and wherever necessary, a two-thirds vote was given. We were present each day, and know that the stockholders adjourned from day to day in conformity to the By-Laws. The entire proceedings were legitimate and regular. The organization was completed on the 8th June. Nineteen Directors were elected, all of whom were eligible, and eleven of these were residents of Texas. A Vice President, Treasurer, and Secretary, now reside in the State. The chief office of the company has been established at Marshall. One of the Texas Directors having

declined to serve, his place was filled by another resident of Texas. All these facts are personally known to us, and admit of no cavil.

Respectfully, your ob't servant,
C. S. TODD,
Vice President, S. P. R. R. Co.
T. H. WILEY,
Superintendent and Treasurer
R. H. RUSSEL,
A Director S. P. R. R. Co.

FOG AND RAIN IN THE MOUNTAINS.

BY DAVID CHRISTY.

Fog and Rain in a Cave—Form of the Mountains of North Carolina—Their Balls—Production of Clouds and Rain—Measurement of Mountains—A Day among the Clouds—Their Movements—A Rainbow—Joanna's Ball—Remarkable Exhibition of Fog—Reflections upon it—Philosophy of Clouds, Rains, and Fogs—Origin of the Remarkable Fog—Its Movements South—Its Dissolution—North Carolina as a Home for the Invalid—Water-Spouts.

The dwellers in the lowlands, who see no mountains towering up into the embrace of the clouds, have but a faint idea of the manner in which their rains are brewed. The first indications they have of approaching storms, usually, is in seeing the dark clouds arise from the horizon, or in hearing the rumbling sound of the thunder from the point where earth and sky are blended. It is quite different, however, in mountain regions. There the eye often first sees the sky overcast at the zenith while the horizon remains quite clear, or the ear is at once stunned by the loudest peals of thunder immediately overhead.

A sojourn of a few months, in the mountains of North Carolina, afforded me an opportunity of witnessing some of the many scenes, constantly occurring, in which fog and rain play their part. Take one instance.

About seven o'clock one morning, while awaiting breakfast, I seated myself in front of a log cabin in which I had tarried over night. It was located in a beautiful cove, surrounded on three sides by mountains, one of which ascended in a peak 1,450 feet and another 1,850 feet above the creek-bed before the door—the highest one having an altitude of about 4,000 feet above the sea level. The mountains range along the north, the west, and the south of the cove. To the eastward there is a wide opening in which hills of moderate elevation only are interposed. On the south, a gap in the mountain affords an outlet to the horseman, and on the west a deep notch serves a like purpose. This notch is intermediate between the two peaks, and is not more than one-third their height.

Suddenly a few misty flakes of fog moved slowly through the notch from the west. Presently larger masses followed, and these, again, were succeeded by still more extensive volumes. Breakfast over, we resumed our seats, the hospitable landlord warning me not to set out on my journey. The fog was now rolling through the notch tumultuously, and filing off gracefully to the right and left, like soldiers passing a defile and preparing to attack an enemy in front.

The sun was shining brightly. The foliage of the forest trees had all the maturity and richness of verdure which the earlier springs of that latitude afford. Among the flowering bushes, beneath the lofty trees, were the Azalias decked in their blossoms of yellow, orange and crimson, and the Rhododendrons and Kalmia in their white and pink. The lilies

and the lady-slippers, with a hundred other plants, in full bloom, lent their gaudy flowers to complete a landscape of unsurpassed beauty.

From our position the fog wore the appearance of gigantic fleeces of the whitest wool. Onward, and still onward, its mass rolled along, the foremost seeming to be impelled forward, not by the winds, for it was calm, but by the fog in the rear; or rather, perhaps, by the attraction of the mountains, or the force of an upper current in the atmosphere.

It was a beautiful scene to witness these bearers of fertilizing showers, as they gathered along the flanks of the mountains, leaving the summits undimmed in the sunbeams, while they gave a refreshing coolness to the circular area which they overshadowed. The sun was yet low in the east. As his empire was thus rapidly invaded, he seemed determined to resist to the last, and sent his beams far up the slope beneath the fog, which had now become so condensed as to wear the appearance of over-hanging clouds. His rays illuminated the vast underlying amphitheater, not shaded by the clouds, causing every dew-drop on leaf and flower to glitter like diamonds. The circles of light and shade, standing in strong contrast before us, produced a scene that was gorgeous in the extreme.

But the clouds, accumulating faster and faster, soon covered not only the mountain sides, but overspread the whole area of the cove; and advancing eastward, covered the face of the sun as with a curtain, shutting out his rays from the landscape around. We were now startled by a sudden flash of lightning, succeeded, instantly, by the roll of the thunder, which, reverberating among the mountains, prolonged its tones to an extent unknown to the dwellers among the lowlands. The rain, which for a few minutes had fallen in a feeble drizzle, now descended at once in a copious shower, as though it had been awaiting the signal of the electric flash to do its errand of mercy.

A word, here, about the form of these mountains before proceeding with farther descriptions. Like all mountains composed of stratified rocks, those of North Carolina run in lengthened ranges, mainly from northeast to southwest. In countries where the unstratified rocks prevail, the mountains mostly are thrown up into dome-shaped forms and are not found in continuous ranges. Here and there, however, in North Carolina, there are points which rise, dome-like, a thousand feet above the ordinary elevations of the mountains around. But they differ in nothing except altitude, from the geology of the country at large. These domes, in the western part of North Carolina, attain a height of 3,000 feet above the beds of the rivers, and about 4,500 feet above the sea-level. Some of them reach an elevation of two or three hundred feet above the line at which the ordinary forest trees can grow, and are destitute of timber, though covered with grasses and flowers. Here and there a group of briars, laurels, azalias and other shrubs, add their presence to vary the scenery of these celestial prairies.

These elevated domes have much to do with the formation of clouds, and the production of rain. They are locally called *balls*, from their round appearance and naked surface. In the clearest days, often, the clouds can be seen forming around them at a greater or less distance above or below their summits. At

times the rain-fall is limited to the area around the ball, where the cloud spends itself so that its remaining vapor is drifted off, or dissolved again in the atmosphere. At other times the clouds accumulate largely, and either from the influence of currents of wind, or from electrical action, they move off so as to water the surrounding mountains and intervening valleys. It is not unusual for two balls, or for the summits of the lower mountains, to be forming wreaths of clouds around their brows at the same moment. These clouds, not infrequently, are attracted toward each other, and thus the vegetation of the intervening districts receives new life and vigor from the rains which they yield.

It is these occasional showers which serve to keep up the mountain springs and streams in perpetual flow, and which supply to man and beast their water to drink, in a purity almost equal to the dews of heaven. The general rains of this region, like those of the Mississippi valley, usually, come from the west and southwest, in broad sheets of cloud overspreading the whole sky.

On the 17th of July, 1857, accompanied by Mr. M. L. Brittain, I set out to measure the height of Valley River ball, in Cherokee county, N. C. The instrument used was Locke's Level. The distance to be measured, from the bed of the river to the top of the ball, owing to the circuitous route to be followed, was little less than five miles. Each sight taken with the instrument included the space between my heels and my eye, or five feet 7 inches; the whole number of the sights from the river to the summit of the ball being 535 and equaling 2,987 feet. The point on Valley River from which we started, is near its head, and probably 200 feet above the bed of Hiwassee river, into which it empties at a distance of fourteen miles. The ball, therefore, must be more than 3,000 feet above Hiwassee.

Before reaching the top of the main ball, a cloud came sweeping along, from the direction of the Tusquitta mountain, and poured down its rain as it progressed. It reached us in the form of a dense fog, as all clouds appear when we are in their midst. The cloud was about 500 feet below the summit of the ball. On striking the mountain's side, it rolled along amidst the trees to the top of the ball. While hovering there, as a hen over her brood, it sent an arm down the eastern side of the mountain, above the tree-tops, to a distance of several hundred feet; and then, as if reluctant to lose any portion of its mass, this arm was drawn up again into the bosom of the cloud. Rendered light and airy, from the loss of its rain, the cloud soon swept off to the eastward, so that we could complete our measurements.

As anticipated, I found all the balls, within a distance of thirty miles, to be about the same height. Two exceptions only existed. Tusquitta ball, to the southwest, and Laurel ball to the northward, were higher than the one we measured. These facts of course were ascertained by Locke's Level from where we stood.

Nearly all the balls in sight, more than a half dozen in number, and many of the higher portions of the lower ranges of the mountains, were repeatedly covered by rain-clouds during the day, which were either formed upon them or floated to them from one or another of the surrounding elevated points. Four or five of these clouds passed up Valley River toward us, but were generally exhausted of their rain before reaching our position.

The valley is narrow, being little more than a mile in width, and runs in a southwest direction to the Hiwassee. These showers presented varied appearances as they succeeded each other. One was from a cloud, the margins of which were equal in depth and density to the main part of its body. Its breadth was nearly equal to the width of the valley. There being little wind, the rain fell vertically, and presented the appearance of a large curtain, of semi-transparent gauze, suspended from the cloud to the earth, and having a length of two thousand feet. Another shower fell, an hour afterward, from a cloud with attenuated margins, but dense center. The sheet of water which fell from it presented the appearance of a semi-transparent fog in its center; but it gradually shaded off toward the margins, into a misty haze scarcely obscuring the objects in the back-ground. It was difficult to distinguish where the rain-fall ceased and the pure air alone existed. A third, which occurred during our descent, was from a dense black cloud that overshadowed the valley and half the adjacent mountains. It had also great length to the westward. The body of water which it afforded was so dense, and the distance through which the eye had to penetrate was so great, that every object in the back-ground was as completely obscured as though the pall of midnight had been drawn across the valley.

We had reached a position two thousand feet below the ball, and one thousand feet above the river, when this shower had so far passed over as to permit the sun to shine out brilliantly from the clear sky in the west. Immediately a rainbow of the greatest beauty was produced. The top of its arch reached a little above the summit of the ball, which we had just measured, thus throwing the main part of the bow below its level, and giving it a back-ground of the richest green which the foliage of the mountains could afford. Two mountains of unequal height intervened between us and the ball. The nearest one was much the lowest, while the other rose half way to the summit of the ball. Upon its entire slope the lines of the rainbow were presented in a richness of color far transcending any thing of the kind I had ever witnessed. Upon the mountain nearest to us as well as upon the distant ball, the colors were paler. The accompanying secondary bow possessed about as much brilliancy as the ordinary rainbows of the lowlands.

The citizens of the vicinity insisted upon naming this ball for me, as I had made the only measurement ever attempted of any of the mountains in the vicinity. I declined the honor, but suggested they might call it JOANNA'S BALL, for my mute daughter JOANNA. This suggestion was adopted, and I since find that the surveyor, Mr. PIERCE, employs it in describing the lands which he surveys.

On another occasion business led me to Clayton, Georgia, in company with Felix Axley, Esq., of Murphy, N. C. Clayton is located in the northeast corner of Georgia, not far distant from Rabun Gap, through which the Charleston and Cincinnati Railroad is being constructed. This gap is formed by a low depression in the Blue Ridge, consisting of some swampy lands in which the headwaters of the Little Tennessee and of the Savannah take their rise. The mountains on each side of this gap rise to the height of 1,500 feet. On the morning after our arrival, Mr. Axley awoke me, about sun-rise, to look at a wonder which he said would interest me, and which he wished me to explain. On looking

out at the window toward the north, I beheld a vast volume of fog, filling the gap from base to summit, and occasionally extending even above the highest parts of the mountains. It was as white as snow, and resembled a vast deluge of cotton as it falls loosely from the gin. In front of the main gap, and between it and the town, there stands a small mountain, detached from the principal range, with a gap upon each side. The fog, as it rolled through the main gap, was deflected into the smaller gap, to the east of the little mountain. On viewing it for a few minutes, I was soon startled by noticing that though the whole immense volume of the fog was rolling forward at quite an observable rate of speed, yet it never passed much beyond the southern side of the little mountain. Onward it came, with a seeming force and bulk sufficient to overwhelm, in its darkness, the whole southern side of the Blue Ridge. But beyond the line named it could never pass. A barrier existed there, in the different conditions of the atmosphere, which at once dissolved the fog, and left the air as transparent as ever. Once in a while a small portion of the fog would whirl forward, a few hundred feet beyond the main mass, like a bold leader in front of an army, as if to encourage the forces behind to move onward with greater daring. But all was in vain, as leader and follower were quickly involved in a similar fate. The law which controlled the movements of the fog, said to it emphatically, "Thus far shalt thou come but no farther."

Turning to Mr. Axley, who had patiently watched me while I was absorbed in contemplating this wonderful phenomenon, I asked him if it had ever occurred before. "Yes sir," he answered, "it occurs every clear morning from spring to fall. Beginning to roll through, a little after daybreak and before the sun appears above the horizon, it continues till from eight to ten o'clock, and this it repeats every clear day, and has repeated doubtless, ever since the creation."

Again I turned to view the fog, and found it coming on to its fate, as regardless of consequences, apparently, as we thoughtless mortals often are when treading upon the very verge of destruction.

"What are you thinking about," inquired Mr. Axley. "Tell me now, for I wish to know your thoughts." "I was thinking, sir, that I have discovered a secret." "Out with it, then," said Axley. "I believe I now know why it is that northern fog makes so little impression upon southern mind. There exists here a physical condition of atmosphere, which at once dissipates any amount of fog that may be engendered on the northern side of the Blue Ridge, and renders it wholly innocuous to the inhabitants of the southern side. So in the southern mind, there seems to exist a moral condition that has for years repelled all foggy invasions from the north, whether of mesmerism, mormonism, spirit-rappings, or abolition. All are rendered innocuous at the south, and have made but little more progress here, than yonder fog is able to do after laboring continuously ever since the waters of the deluge receded from the face of the earth." "Well done, well done," said Axley, and away he went to allow me to finish dressing so as to be in time for breakfast.

Before explaining the phenomena attending the fog at Clayton, and the causes of the production of clouds and rain in the mountains, a few general principles in natural philosophy must be stated.

At all temperatures moisture exists in the atmosphere in an invisible state. It sustains itself there in the intervals that exist between the particles of air. These intervals are either partially or wholly filled with the vapor constantly arising from the earth. When they are wholly filled with vapor, the atmosphere is said to be saturated. An increase of temperature, by dilating the air, increases its capacity for moisture; while a diminution of temperature is followed by contrary effects. But the capacity increases at a faster rate than the temperature, so that while the air, at 32° Fahrenheit, can contain only the 160th part of its own weight of vapor, at 113° it can contain the 20th part of its own weight. Thus it appears that while the temperature advances in an arithmetical series, the capacity is accelerated in a geometrical progression. A considerable increase of temperature, therefore, will enable even a saturated atmosphere to receive a greatly augmented amount of vapor, and, as it were, to swallow the clouds that may pass into it, without any diminution of its own transparency. On the contrary, when the temperature is diminished by the rapid union of two currents of air, saturated with vapor, the one being warm and the other cool, the average temperature is so reduced that an excess of vapor exists, which is incapable of sustaining itself in the diminished capacity of the air, and is necessarily precipitated in the form of rain. But when two currents of air, not fully saturated with vapor, are brought into contact, the precipitation of moisture is slight, and mists, only, are produced. When the mists, thus precipitated, are near the earth, they are called *fogs*, but when high in the air they take the name of *clouds*.

Saussure and Kratzenstein have investigated the nature of fogs and mists. The vapor, in this condition, is found to consist of minute globules, upon which rings of prismatic colors were discovered, like those seen upon soap bubbles, but which are never observed upon drops of water. From this discovery it was concluded, that the globules are hollow and filled with air or gas. The size of these globules is greatest when the atmosphere is very humid and least when it is dry.

Another fact must be noted. The temperature of the air diminishes with the altitude, but the law of decrease is very irregular, being affected by latitude, seasons, hours of the day, and a diversity of local circumstances. It may, however, be assumed as a general rule, that a loss of heat occurs to the extent of one degree, Fahrenheit, for every 343 feet of elevation. But this is an average result, for the rate of decrease is very rapid near the earth, after which it proceeds more slowly, and at the loftiest heights is again accelerated.*

*Brocklesby's Meteorology.

COMMERCE OF FRANCE.

We take the following very valuable statistics of the commerce of France from the *London Economist*:

The total value of all importations made into France for domestic consumption and for exportations of foreign countries, was, in 1855, 2,159,700,000*f.*; in 1856, 2,740,200,000*f.*; and in 1857, 2,689,000,000*f.* The total of last year was, it will be seen, nearly 5,000,000*f.* below that of the preceding year. The total value of all exports made from France—that is French and foreign productions com-

bined—was, in 1855, 2,159,700,000*f.*; in 1856, 2,740,000,000*f.*; and in 1857, 2,639,300,000*f.* The value of exports last year was consequently less, by about 100,000,000, than that of the year before. If we take the total value of importations for French consumption alone, we find these figures:

1855.....	1,594,100,000 <i>f.</i>
1856.....	1,989,800,000 <i>f.</i>
1857.....	1,872,900,000 <i>f.</i>

The value of the imports last year was consequently, £4,676,000 less than in the preceding year. If we take the total value of exports of French productions alone, we find these figures for the said three years:

1855.....	1,557,900,000 <i>f.</i>
1856.....	1,893,100,000 <i>f.</i>
1857.....	1,865,900,000 <i>f.</i>

The value of the exports last year was consequently over 28,000,000 francs below that of the preceding year. On the whole, these returns are less unfavorable, especially as regards the exclusive commerce of France, than from the commercial crisis of last year might have been expected; but it is to be remembered that this crisis broke out at the latter part of the year, and that the French, by means of extensive renewals of bills, staved off a great part of the consequences of it to the present year. The totals of French imports and exports above given, do not comprise the precious metals.

MONETARY AND COMMERCIAL.

Currency is still reported to be greatly in excess of the demand, although there has been a slight improvement in the offerings. The great caution heretofore noticed in the selection of paper, still continues, notwithstanding the surplus of capital, and names not well known meet with but little favor.

There has been a slight movement during the last few days among grain dealers, and some currency has thus found its way into the interior.

Nothing other than a change in the European crop news will be likely to produce any material advance in bread stuffs, and without that advance, general business must remain in its present dull state, or experience but a very limited acceleration. The result of our own crop news derived from our exchanges, and our own personal observation and inspection, now that most of the harvest has been gathered, is that the wheat may be considered *fair*, although considerable short of an average; in our immediate neighborhood the intense hot weather of the middle of June, caused the wheat to ripen rapidly while the berry was filling, thus leaving it in a dried up or shrivelled state; up to the 10th or 15th June it was exceedingly promising, and if the cool weather had continued the yield would have been immense. The weather has been very favorable to harvesting, and not near so much damage will be done this year as occurred last by sprouting. In the spring grain regions of Southern Illinois, Indiana, and Iowa, much injury has been done by rust, and the crop will be short. Oats, up to the same period that affected the wheat, were boasted of all over, but the same cause has had similar effect upon them, and they may be considered in a great measure a failure; there will not be half a crop. Barley is good, and will be used to some extent in place of Oats. The "heated term" in June that committed so much injury to the other crops was just the thing for Corn, and it now looks well, and should we have a favorable fall, we will probably have a better crop than last year's. On the whole we have no ground to grumble, and if we can but find sufficient market for our produce, we will get along very well.

The Governor of Wisconsin has refused to issue patents to the La Crosse Railroad for the lands which the Company claim to be due them.

PITTSBURGH, July 24.—George W. Cass has resigned the Presidency of the Pittsburgh, Fort Wayne and Chicago Railroad. J. Edgar Thompson was elected to fill the vacancy.

On Friday, July 23, the Canandaigua and Jefferson Railroad was sold for \$200,000 to C. N. Potter in behalf

of the first mortgage bondholders. The road is forty-seven miles in length, with the broad gauge track. Mr. Potter recently purchased in the same manner the Canandaigua and Niagara Falls Railroad, which has since passed into the hands of the Central Road.

The New York Post of Saturday afternoon says:

The stock market opened rather steady this morning, but before the close of the session, decided weakness was apparent, and prices close about 1-8 and 1-2 per cent. lower.

Pacific Mail, Panama, Illinois Central, Galena, and Michigan Central were the exceptions to the market and closed firm.

New York Central and Erie were both heavy. Chicago and Rock Island was sold down to 77½.

La Crosse continues weak, and has dropped to 4½. The Land Grants closed at 31½.

PITTSBURGH, FORT WAYNE AND CHICAGO RAILROAD CO.

AUDITOR'S OFFICE.
PITTSBURGH, July 19, 1858.

The earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Company during the month of June, were as follows:

From Freight.....	\$39,234 53
" Passengers.....	5,430 42
" Mails.....	4,462 29
" Rent of Road.....	5,500 00
" Miscellaneous.....	187 17

Total.....	\$107,834 41
Earnings during same month last year.....	130,321 40

Decrease.....	\$32,486 99
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The expenses in June, 1857, were.....	\$94,317 51
" " 1858, "	78,290 54

Decrease.....	\$16,026 77
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The net earnings in June, 1857, were.....	\$36,004 09
" " " 1858, "	29,543 87

Decrease.....	\$6,460 22
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The earnings for the half year ending June 30, 1857, were.....	\$820,580 82
The earnings for the half year ending June 30, 1858, were.....	707,640 19

Decrease.....	\$112,940 63
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The expenses during the same period in 1857, were.....	\$521,007 87
The expenses during the same period in 1858, were.....	436,024 13

Decrease.....	\$84,983 74
---------------	-------------

Net earnings during the same period in 1857, were.....	\$299,572 95
Net earnings during the same period in 1858, were.....	271,616 89

Decrease.....	\$27,956 06
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T. D. MESSLER, Auditor.

RAILROAD AND TAXES.

An important railroad decision has just been rendered in the United States Circuit Court of Ohio. The complainants in the case were mortgagees of the Steubenville & Indiana Railroad Company, and trustees under the mortgages, for the holders of the bonds secured thereby. The Company had defaulted on the interest due upon these bonds, and the defendant, Levi Sargent, the Treasurer of Tuscarawas county, had seized a locomotive and some cars embraced in said mortgage, and was proceeding to sell the same to pay the taxes assessed against the Company for the year 1857, which was subsequent to the default in the payment of interest. On the ground that the Company were unable to replace the locomotive and cars in case they were sold, and that the use and possession of the same were absolutely necessary to the operation of the road by the Company, the bill prayed for an injunction to restrain the Treasurer from selling them. Upon the filing of the bill, a provisional injunction was granted, but upon a hearing of the case this was dissolved. Judge McLean held that the lien of the State for taxes was paramount to all private rights invested under

the government, and further, that the default of interest on the part of the Company did not vest in the complainants the road and equipment as mortgagees, but authorised them to take possession of the road and run it, or to sell it at public sale; that the ownership of the road could only be changed by a sale of it.

LITTLE MIAMI RAILROAD PROPERTY.—The following is the return of the Little Miami R. R. property, subject to taxation within the county of Hamilton, and sent to the County Auditor:

	Real and Fixed.	Moveable.
In City of Cincinnati.....	\$257,804 05	\$66,210 36
Spencer Township.....	94,802 45	24,443 25
Columbia ".....	72,756 19	18,746 74
Symmes ".....	11,305 92	2,847 76
Total.....	\$436,758 61	\$112,249 11

The aggregate valuation of the real and moveable property of the Ohio and Mississippi, the Little Miami, and the Hamilton and Dayton Roads, within the city and county is as follows:

Ohio and Mississippi.....	\$228,085 00
Little Miami.....	549,007 72
Hamilton and Dayton.....	538,565 83
Total valuation.....	\$1,313,658 55

THE RIGHT TO USE PUBLIC HIGHWAYS FOR PASSENGER RAILROADS.—The Legal Journal, published at Pittsburg, contains a decision of the Nisi Prius of Philadelphia, on a motion for a special injunction against the Second and Third street Railroad, argued June 36th. This decision lays down the governing principle with respect to the public right to the use of highways which has been a subject of discussion recently. The public highways belong to the people, and through the Legislature, the people may devote them to such uses as the public convenience requires. Their authority is supreme, and they do not have to ask any one's consent to such use as the public may desire the highways to be appropriated. To build a railroad without authority of law, would be a nuisance which a Court of Equity could prevent, but when the Legislature gives its sanction, it is no longer a nuisance, and no equity can interfere.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Ferrell, Chair-back and Swing Saws, Concave Felloe Saws, Saw Mandrels, Turning Lathes, Dental Lat Screws Cutters, Lithograph and Tincture Presses.

TUBULAR RAIL.



surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

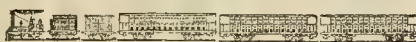
Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing

E. W. STEPHENS,

Cincinnati Ohio.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE. INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jackson, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

W. M. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

to 9 P. M.

H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, ar Broadway, New York.

G. W. MORRILL.

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MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.,

CLEVELAND, OHIO,

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Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in a cases. ap 16

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
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The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

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G. R. DYKEMAN, } Alton Ill.

O. W. CHILDS, Syracuse, N. Y.

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Mathematical and Philosophical Instrument Maker.

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Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

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Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

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1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

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ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

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D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

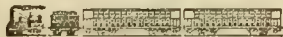
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PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,
LOCOMOTIVES OF SUPERIOR QUALITY.
 Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.
 Jy. 27. RICHARD NORRIS & SON.

Morley's Patent Railroad Chair.

PATENTED JUNE 2D, 1856.

THE attention of railroad companies is most respectfully invited to this chair, which is believed to be the best in use. It being made of two parts, secured together by bolts passing underneath the rails, it can therefore, by means of the nuts, always be kept firmly in its place, trussing the joints in a manner to prevent them from settling, and the ends of the rails from being battered.

The chair having been in successful use during the past ten months, it is now offered to the railroad public with the utmost confidence in its merits.

For further information, address the patentee—
 JAMES H. MORLEY, New York City.
 Or SUMNER SMALL, Boston, Mass.

ap8

F. W. RHINELANDER.

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RHINELANDER, BOORMAN & CO.,

RAILWAY AGENTS

AND

COMMISSION MERCHANTS,

Supply all material and articles used in the construction and operating of railways

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Refer to John A. Stevens, Esq., President Bank of Commerce; James Boorman, Esq.; Samuel Sloan, Esq., President Hudson River Railroad Co.; Messrs. Cooper & Hewitt, Messrs. Duncan, Sherman & Co., Messrs. Stillman, Allen & Co.
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IRON BOILER FLUES
PASCAL IRON WORKS.

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Manufacturers of

LAP-WELDED BOILER FLUES,
 o 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,
 From 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc

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4,000 Tons rails, 58 to 61 lbs. per yard 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

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(SUCCESSORS TO BRIDGES & BROTHER,)
 Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,

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COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, an Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

ALBERT BRIDGES,

Of the late firm of Bridges & Bro
JOEL C. LANE

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NOTICE TO CONTRACTORS.

PROPOSALS will be received at the Office of the Memphis, Clarksville and Louisville Railroad Co., at Clarksville, Tennessee, till the first day of July next, for the Grading, Bridging, Masonry and Superstructure, including the Iron with partial equipment of Furniture, Engine Houses, Depots, Tanks, &c., &c., for Forty-two miles of the road between the Cumberland and Tennessee Rivers. The Company will also conclude—previous to the time of letting the policy of letting the remainder (24 miles) of the Road to the junction with the Memphis and Ohio Railroad. In the present contract there will be, by approximate estimates, 850,000 yards Earth; 60,000 yards Rock; 1,000,000 feet Trestling B. M.; 2,500 yards Plane Masonry; 1,000 yards Arch Masonry; 3,000 yards Bridge Masonry, with the two Bridges across Cumberland and Tennessee Rivers—one containing 4,500 yards masonry and 600 lineal feet bridging—the other 8,000 yards masonry and 1,500 feet bridging. 44 miles of Iron, 60 lbs. to the yard, with Chairs, Spikes, &c., Depots, &c., and Furniture. Previous to the letting, all necessary information may be obtained by addressing George B. Fleece, Chief Engineer, at Clarksville, Tenn. The Engineer, or some agent of the Company, will also be at the Burnett House, in Cincinnati, on the 1st, 2d, and 3d, and at New York, at the Saint Nicholas, on the 6th, 7th and 8th of June, where bidders may get extended information of assets of Company, and see plans and profiles of whole line of Road. Bids will be received for the work by sections in detail, or for the entire work ironed and equipped. The whole work to be completed in running order by the 1st day of October, 1860.
 W. M. B. MUNFORD, President.
 Clarksville, Tenn., May 1, 1858.

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars
 Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,
 1 n24 NEWARK, N. J.

MOSELEY'S
TUBULAR WROUGHT IRON

ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE
 been now fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges

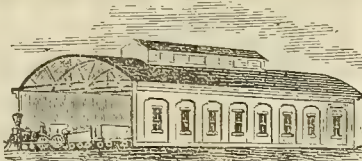
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to 120 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
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DAVENPORT... M. D. WELLMAN... C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the State.

Feb. 1862

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

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ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

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CHAS. W. COPELAND.

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Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 258 H Street, Washington, D. C.

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172 Elm Street, bet. 4th and 5th,

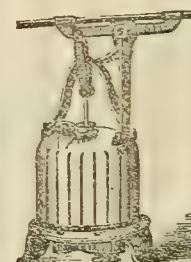
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

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1000 TONS Railroad Iron, weighing about 100 lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

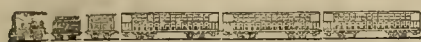
Feb. 1858.

Mar. 25, 18.

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Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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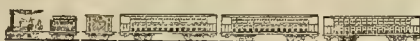
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ON AND AFTER MONDAY MAY 10TH
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6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

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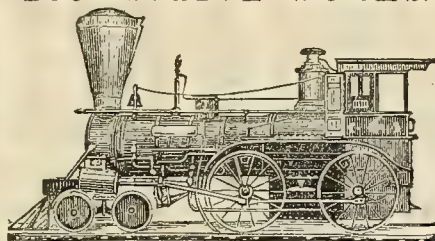
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Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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LOCOMOTIVE WORKS.

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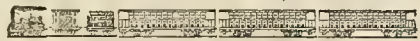
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One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

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Cincinnati, Hamilton & Dayton



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7.30 A. M.—Dayton, Lima and Sandusky Mail Express.

4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6.00 P. M. Train for Hamilton.

RETURNING TRAINS

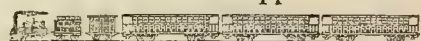
Leave Dayton at 8.05 A. M., 2.30 and 6.30 P. M.

Leave Hamilton at 6.55 A. M., 9.40 A. M., 12.10 P. M. and 4.05 and 8.00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Sup't.
Racine, May 15, 1857. my21

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No. 5 FRONT STREET

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We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook head Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.**Union Works, Baltimore.****POOLE & HUNT,**

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

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ANDERSON, GATES & WRIGHT,**STATIONERS, BOOKSELLERS,**

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East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

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SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

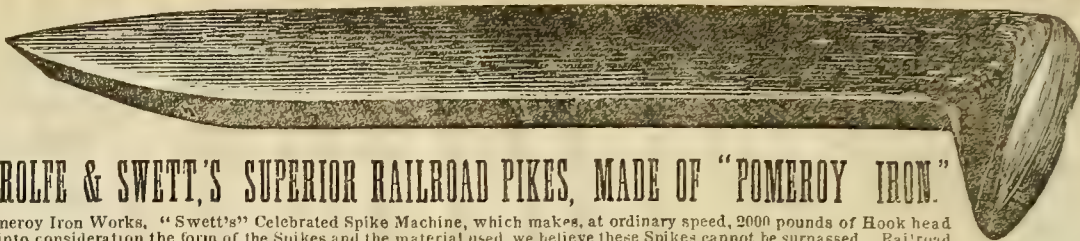
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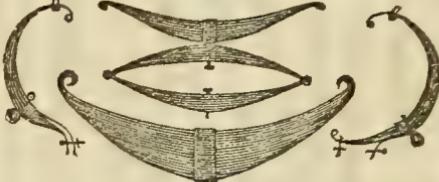
AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.**WALTER McQUEEN Sup't.** Aug 17

M^C DANIEL & HORNER,
LOCO-  **AND CAR**
MOTIVE **SPRING**

MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.**NORRIS BROTHER'S, Locomotive Builders, Philad.****A. C. GRAY, Prest. New Castle Manuf. Co.****U. WELLS, R. R. Car Manuf. Petersburg, Va.****I. R. TRIMBLE, Supt. Philad. R.R. Co.**

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.**EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.****THOMAS DOUGHERTY, Master Mach. do.****THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.****G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.****BUSH & LOBDELL,****Wilmington - - - - - Delaware.**

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EITHER SINGLE OR DOUBLE PLATE.

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Most Reasonable Terms.

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MACHINERY.**PASSENGER CARS** of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

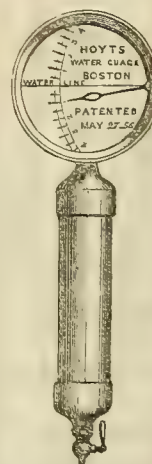
From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freight.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

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9 Spruce Street, New York.

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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No. 66 Broadway, N. Y.

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, AUG. 5, 1886.

Railroad Record

PUBLISHED EVERY THURSDAY MORN'G.

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MINNEAPOLIS AND CEDAR VALLEY RAILROAD—CONTRACTS LET.—We learn from the *Hastings Ledger*, that the contracts of the Shore road from Minneapolis to the Iowa State line, were awarded on the 15th inst., as follows: The lower 42 miles to R. B. Mason & Co., 25 miles to McDonough & Co., 25 miles to Nash and McGrorty, and 20 miles to Bradley & Co. These parties are gentlemen of responsibility; they are to begin work immediately, and the *Ledger* says they will probably have the road entirely graded some time during the coming year.

The State Treasurer of Pennsylvania is ready with the interest due by the Commonwealth. Those who were formerly paid at the Bank of Pennsylvania will receive the interest on their loans at the Farmers and Mechanic's Bank. The coupon bondholders will be paid as usual at the Girard Bank. The amount of the public debt is about forty millions of dollars; of which about thirty-eight millions bear five per cent. interest, and the remainder six per cent.

WHAT IS THE COST OF CARRYING PASSENGERS ON RAILROADS?

At the present time this is the most important problem connected with railroads; and yet, strange to say, it is yet undetermined by any accurate solution! We are aware, that a good many railroad engineers and superintendents say, that it costs so much, and pronounce authoritatively on the matter. But, when we look into it, we find these statements very contradictory, and we find also that they do not agree with the facts reported of the running expenses. The reason is very obvious. A road which carries but ten passengers one hundred miles, must pay a great deal more to carry one passenger, than another road which carries one hundred passengers one hundred miles. In fact, all increase of passengers must diminish the expense of carry any one of them. But, as the business of roads vary very much, in this respect, we cannot make an exact calculation for all roads. This we can do, however; we can take roads of good business, and which are finished, and estimate what is the cost for each one; and we can also assume, that a certain road would carry a certain number, at such a price, and determine the result. In doing this, however, we should have the detail of expenses, and that is what we do not have in most railroad reports.

We have enough, however, to approximate correct results. Let us take one or two practical examples. In the report of the "Cleveland, Columbus and Cincinnati Railroad Co.," for the years 1855 and 1856, gives full details of its business. It gives the passenger, and the freight expenses separately; but, in addition, general expenses, which are not credited to either. The passenger trains ought to pay their proportion of that. We find, that for 1856, the proportion received for passengers was about one-half of that received for freight. Hence, one-third the general cost of the road, repairs and incidentals would be fairly chargeable to the passenger trains. Taking this into view, with the proper expenses of these trains, we obtain this result:

One-third General Expenses	\$ 7,028 06
" Repairs of Tracks	31,541 33
" Buildings, Fences and Bridges	7,024 00
" Locomotives and Cars	42,354 00
" Other Expenses	35,810 00
Passenger Expenses	76,043 00

Total Passenger Expenses.....\$199,400 39

Now, we find by the Report, that in the same year, 17,363,695 passengers were carried one mile. Dividing \$199,400 39, the cost of carrying passengers (as above ascertained,) by the number carried one mile, we find that the cost of carrying a passenger one mile on that road, was, in 1856, exactly 1.1 cent, or 11 mills. The whole number of passengers was 308,041; and the average distance carried, 56 miles. Hence, the actual amount which each passenger cost was 61.6 cents. In 1855, the cost of carrying a pas-

senger was just about the same, although the number carried was a great deal more.

From the Report of the "Central Ohio Railroad Co.," it appears, that the proportion of passenger to freight receipts was, as three to four, and the total expenses, ordinary, and extraordinary, were \$576,000. Hence, the cost of passenger transportation was \$240,000. The number of passengers carried one mile, was 10,679,192; so that the actual cost of transporting passengers on the Ohio Central Railroad was 2.2 cents, double that of the Cleveland Road. Nearly one-third the expenses charged, were, however, extraordinary; so that the real expense of the passengers was about 1.31 cents. The average number of miles traveled by each passenger was about 65, which was more than that of the Cleveland Road, and, therefore, favorable to the road.

Mr. Gest, President of the Wilmington and Zanesville Railroad has, in a very able and elaborate analysis of the condition and workings of that road, shows that the actual cost of carrying a passenger on that road, was 2.69 cents! This is nearly double the cost on the Ohio Central, and much more than the cost on the Cleveland, Columbus and Cincinnati Railroad.

In looking into the other conditions of the case, we find the reason at once. The average distance carried on the Wilmington and Zanesville Railroad, was only 30 miles. The distance from Morrow to Zanesville is 131 miles. Hence, a train going 131 miles, and averaging the distance of its passengers, that 30 miles has, in reality, run four times as far, in proportion, as if it run full the whole distance. On the other hand, the Ohio Central is 143 miles long, and its passengers average 68 miles. Hence the Central Ohio Road gets paid nearly double in proportion to the cost of transportation, which the Wilmington and Zanesville does.

The whole operation of these roads, as to cost and profit on passengers, will be explained, at once, by the following brief table:

	No. of Passengers.	Average Distance.	Cost per mile.
Cleveland, C. & C.	308,041	56 miles.	1.1
Central Ohio	189,918	65 "	1.31
Cin., Wil. & Zanes.	97,980	30 "	2.69

Now, these roads are nearly the same in length, and we see, at once, that other things being equal, the cost of carrying a passenger is reduced in nearly the same proportion as the number is increased. On the other hand, if the length of the road, and the number of passengers are equal, the cost of carrying a passenger is in the inverse ratio of the distance carried. Thus, in a perfectly well regulated road, not requiring any extraordinary repairs, the cost of carrying a passenger is in inverse proportion to the combined ratio, of number and distance carried. In the cases before us, the Cleveland Road has a less average length carried than the Central Ohio, but many more passengers, so that the combined ratio of num-

ber and length is much greater, and hence the cost of carrying a passenger is much less. In the Wilmington Road the contrast is much stronger.

We may say, in conclusion, that on a well conditioned road, carrying 300,000 passengers, the cost of carrying a passenger *one mile* does not exceed *one cent*. Of course, the problem varies with the number and distance carried.

We intend giving other examples, so as to test this principle.

WOODEN BRIDGES.

Since the dreadful disaster on the New York Central near Utica, the subject of wooden bridges has been considerably discussed by railway men, and the opinion seems fast gaining ground that these structures are not suitable for railway purposes, and should never be employed except under emergencies—certainly no wooden structure should be used to replace an old one.

From a recent report of the Engineer-in-Chief of the Grand Trunk Railway of Canada, we gather some very interesting facts bearing on this subject.

Upon the Montreal and Portland Division, (says this Report,) there are now 55 wooden bridges, in all, 9355 feet long—all, with a single exception, "Howe Trusses without arches."

These bridges, at the date of this report, were from four to eleven years old—the earliest having been built in 1846, the latest in 1853.

"The old or first set of bridges are in various conditions of safety, or of insecurity, and demand constant and careful inspection to maintain them in a reliable manner.

"Those which were covered in shortly after they were built, are in a pretty good state of preservation. The painting and decking of others, without covering the sides, has been but an *imperfect protection*; but all of them were too lightly timbered in the first instance to endure for any length of time the great strain to which they are continually subjected, and for this reason, and in some instances from inferior workmanship and materials, have given indications of premature decay and failure.

"The *unprotected ones* have failed more rapidly, and some of them are now propped up on bents.

"The condition of these bridges may be taken as a sufficient proof, that for the purposes of a first class railway—such as the Grand Trunk—*wooden bridges are but a temporary adaptation*, and should never be replaced with wood, except in cases of necessity, when, as in the present instance, (with regard to some of these,) it will be impossible to procure and put up *iron*, within the time they are absolutely required. *Unprotected bridges*, submitted to heavy traffic, especially where coupled engines are used, will not last out more than *five or six years*, and those which are covered and properly cared for may last *twenty years*; but they are all liable to be burned up, and so for a time put a stop to business—which might cause more damage to

the company on that account, than the entire cost of the bridge itself. The report goes on—

"We, therefore, consider it the interest of the company, and strongly recommend that arrangements should be made for having all the *wooden bridges* replaced by iron tubes or girders.

"Taking the whole line through, the cost of iron bridges will be (on 7835 feet run,) a little more than *double* that of wood, but in the single instance of the Richelieu bridge the cost will be a little less than *three times*.

"There are some bridges, however, which must be rebuilt at once in wood, and for these we consider the best form for strength and durability is the *Burr arch and truss bridge*. It is a form which has stood the test of time, and is generally acknowledged to be the most reliable and satisfactory. No (wooden) truss of large span is suited for railway purposes, unless combined with the *arch*, and the condition of the bridges on this line may be considered as confirmatory of this statement."

We do not fully agree with all the conclusions of this report, for we believe that wooden bridges have been, and can be constructed so as to serve with perfect safety any amount of work, and when properly painted and protected from the weather, will last a very long time; yet, we think it poor policy to erect these structures whenever iron or stone can be had. Iron, however, is not always reliable—the fault of the workmanship, no doubt, more than of the material, though the latter is not above suspicion—and several severe disasters have occurred in Europe from the failure of iron bridges. A good stone bridge is unquestionably the most substantial, and when that material can be had, and of the right quality, we should urge its employment. Wrought iron, however, in many cases, would be cheaper, and if properly put together, equally as durable. Cast iron should never be employed in works where there are sudden strains, or heavy percussions, except as bearers, or bed pieces to support weights.

We are not prepared to advocate any particular form of iron bridge; but for lightness, combined with great strength, and for facility of erection, we think the Mosely bridge equal, if not superior to any of its competitors, while its cheapness recommends it to the consideration of railway engineers. Tubular bridges, such as the Menai and Victoria, are probably the best for long spans; but their great cost, must prevent their introduction on American roads until capital becomes cheaper, and the profits of railway traffic more certain than at present. Yet, even these have their opponents, and "An Engineer" in the *Buffalo Express* is seriously questioning, and with some show of reason, the principle upon which they are constructed; but with this we have nothing to do at present, our object being simply to call the attention of railway managers to the necessity of looking after their bridges, and when necessary to replace them with more permanent structures.

ILLINOIS CENTRAL RAILROAD.

Below we give a very interesting and instructive article relative to the management of this great enterprise. It is too often the case that a desire to grasp too much endangers the whole. The illiberal policy pursued toward the hardy settlers of a new country by those who themselves have received such magnificent donations from the people, does not comport well with the manner in which they have been treated, neither will they find it so beneficial in the end, as a high-minded liberality corresponding with what they have received.

[Correspondence of Railroad Record.]

CHICAGO, July 27, 1858.

Editor R. R. Record:

DEAR SIR—Yours of the 5th is received, asking my opinion of the position and prospects of the Illinois Central Railroad Company. You are complimentary enough to say, that my experience with railroad and canal management, should entitle my opinions to consideration, and may be of service to the Stock and Bondholders of that Company. In reply to your favor, I will say, that although it will afford me pleasure to express my views on a few points which may seem to need improvement, yet in doing so I wish it understood, that I have no disposition to question or discuss, the management of resident officials, who, I doubt not, faithfully carry out the policy dictated to them.

The policy of railroad corporations is inaugurated and directed by the management—by the advice and guidance of its President. That officer is presumed to have railroad experience, practical common sense, and a general knowledge of the road, its officers and of the people, who are brought into business relations with it—to be able to guard the management from falling into gross errors of policy. This is particularly the case with respect to the Illinois Central Railroad, whose managers sit in the city of New York—many of whom have never been in the State, and all of them ignorant, from personal observation, of the requirements of the road, and of the necessities of buyers of their lands. I do not doubt these gentlemen are able, intelligent and practical men, with a full knowledge of their responsibility to the property holders, but from the want of proper guidance, by their chief administrative office, they have unfortunately fallen into errors of policy, which is having a serious bearing on the prosperity of the Company.

In opening the sales of Land, I did not fail to urge upon the directors, the necessity of drawing a population, as rapidly as possible on them. The great necessity of this corporation seemed to me to be to people the sparsely settled prairies as fast as ingenuity could plan and devise. The road equipment and working force were kept up at a large

annual expenditure—to meet interest, repairs, and operating services. It was, in my opinion, essentially requisite to open as quickly as could be done, in order to offset the expenses of so costly a road in so new a country, every avenue to increased traffic. The wild uncultivated prairies were of no benefit to the road, without people, whose activity and wants, would create passenger travel, and the transportation of material for living and improvement to the lands, and the product of the soil to market from them.

The price at which these lands were to be sold, I maintained to be comparatively, a secondary object. A few dollars more per acre a year or two hence, would be no compensation for traffic lost, in keeping the lands unsettled, while waiting for the increased value. I endeavored to act upon this principle by selling nearly \$5,000,000 of lands during the ten months in 1855 in which I had charge of that department of the business. I had made the enterprise widely and favorably known by copious advertising, and flattered myself, with such a beginning, \$10,000,000 of lands would have been sold in 1856, and \$15,000,000 in 1857. Had these expectations been fulfilled, there would have been \$30,000,000 of land notes in the treasury of the Company at the end of the year 1857, instead of \$15,500,000 as proved to be the aggregate at the end of that year. There would then have been what I conceive of greater moment than even the sale of the landed interest—*there would have been double the population scattered over the lands, to furnish the road with an immediate traffic for the enormous outlay of machinery and men, provided and kept daily running in anticipation of a large business. More compact neighborhoods would have resulted, affording better facilities for living, and performing agricultural labor, and consequently insuring more reliability and certainty of payment of the land notes, which must depend upon the increasing value of the lands.*

This policy, I regret to say, does not seem to have been continued by the management after my resignation. I judge from the fact, that a total of only \$10,000,000 lands were sold in the following two years. The activity used in making the first ten months' sales, seems to have created the alarming apprehension with the management, that a continuance at the same rates would soon absorb the whole landed interest! To prevent so serious a misfortune, prudent forecast wisely suggested, a large advance in price in localities where the lands were most likely to sell best! The management now has the happiness to see its sagacity and comprehensiveness crowned with success equal to its most sanguine expectations. A large proportion of the emigration which pressed upon them in 1856 and 1857, and which came from the east expressly to buy lands of the Company, were compelled reluctantly to contrast their lands and prices

with the same in other localities in this and the adjoining States and Territories. The contrast was unfavorable to the interests of the Company. A population has been turned away that would have helped to build up a traffic for the road. Thus the spirit and intent of the State Government, in conferring this magnificent grant of lands—namely the immediate and rapid settlement of the prairies for the benefit of the commonwealth has not so far been fully and completely carried out by the Company to the best advantage.

Unwise counsels seemed to me to have prevailed also, in reference to the maturing obligations of buyers. It is well known in this State, that a large proportion of the adjoining tracts to these railroad lands of equal value for agricultural purposes can be bought of individuals at from one-third to one-half the amount in cash, that purchasers have agreed to pay the Company for the credit. They believed it to be their interest, to use the credit, *even at this high price*, in order to appropriate the funds at command, to make improvements, and raise crops. In this the interest of the buyer and seller were identical, and in selling, I availed of every argument at command, to induce them to appropriate their funds in that way, content to await the reasonable reward of industry to meet the deferred payments. It was not without anxiety that many buyers assumed obligations which they saw no way of liquidating, but in the products they should raise and sell off of the lands then purchased. The statements of experienced agriculturists throughout the State, which the Company had circulated widely, furnished a reasonable assurance that such results might be attained. In anticipation of low prices, unpropitious seasons, or inexperience in prairie culture, the question was often asked of me by buyers—In case the products of the new farms are not sufficient to meet the deferred payments at maturity, what will likely be the course pursued by the Company towards us? My reply was: "I am not authorized to answer you officially, but if you improve and cultivate the lands in accordance with the tenor of your agreement, as the Company borrow the funds in Europe at seven per cent. interest for a long period of years, which your payments would go to liquidate; it seems to me that they will extend to you at the same rate of interest, should your necessities at the maturity of your obligations require it." It appeared to me that such an accommodation was but equity to buyers, taking into consideration the high prices they had paid for credit. It was a favor also that appeared to me, to go hand in hand with the interests of the Company, as by such extensions, the money was retained in the country when most needed, to give greater impetus to improvements of the lands, whereas the withdrawal of it to take up bonds before maturity was draining and

impoverishing an interest which it was clearly the policy of the Company to nurture and sustain—certainly at so small a cost to itself. Such answers quieted the apprehensions of the distrustful, and probably enlarged the sales \$1,000,000 more than would otherwise have been made that year.

Understanding, through purchasers, that the Company was making extensions of but a few months, in the most urgent cases, and that at *ten per cent. per annum interest*, I deemed it my duty to advise some members of the Board of the circumstances as detailed above, under which a large amount of these lands had been sold by me. I am not since advised from any quarter of either more liberality in the rate of interest charged. If the management was resident, composed as it is of intelligent gentlemen, it would see that the unexampled difficulties and discouragements of the past two years, by wet weather and low price of grain, would dictate to them the wisdom of granting the most liberal extensions on maturing notes at *seven per cent. per annum interest*, to their land buyers, before the pressure of public sentiment compels a reluctant assent. For if the lands have been sold on a credit, from half to two-thirds more than what they would have sold for in cash, then seven per cent. per annum interest on these maturing payments, would be from fourteen to twenty-one per cent., and at ten per cent. per annum interest would be from *twenty to thirty per cent!* No man acquainted with the agricultural interests of this State will assert that industry on new prairie land has been rewarded by 6 per cent. per annum interest, during the past two years of discouragements and difficulties. An exaction of 7 per cent. per annum interest on these maturing obligations, under existing circumstances, is quite burdensome enough with the credit price at which these lands were sold, and should rather be reduced, than increased. Ten per cent. per annum interest on extended deferred payments, will cause an abandonment of the land, in many cases, and generally create discouragement and depression unfaycrable to a healthy growth and improvement, on which this road relies almost solely for its prosperity. A compliance with this high rate of interest demanded, takes from the farmer his ability to enlarge his cultivation, and prosecute it with energy, and published at the east, among the friends of those already on the lands and others, the inexpediency of making future purchasers of a Company, so extortionate in its rate of interest to those, who, from any cause, might be prevented from meeting promptly their maturing notes. The effect of this policy is now clearly felt in the traffic for the present working force of machinery and men now provided, and is lessening very much at the present time, the daily sales of land. A large proportion of those on the lands are discouraged

and without any disposition to make more improvements, fearing that the high rate of interest will, in the end, sweep from them the result of their hard toil.

One other point, I propose to notice, as having a depressing effect upon this enterprise. Since the road has been opened, there have been running each way two through passenger and one freight train every twenty four hours, beside some local trains. One passenger train each way every twenty-four hours, with a passenger car attached to the daily freight train, it seems to me, would give satisfaction, and all the necessary accommodation to the public, at least until the country becomes more compactly settled to net a supporting traffic, and the finances of the road are in a more prosperous condition. It is certain that if all the passenger travel was transported in one train every twenty-four hours, it would not, from its magnitude, be likely to endanger the proper working of the engine. Two passenger cars each way daily would probably be sufficient to contain it. If this basis is correct, as the road is 704 miles long, then the management is running one useless trip of 1,408 miles per day. It is generally assumed that trains are run at the cost of about \$1 00 per mile. In the west that sum is more generally exceeded than reduced. This would then be a useless expense of fourteen hundred and eight dollars per day, or \$440,000 per annum of 313 working days. An economy, if footed up from the beginning of the enterprise, sufficient to have gone far to save the Company from the mortification of its late humiliating assignment. In conclusion, I have to say, that the projection and completion of this great enterprise is worthy of the gentlemen who have been connected with it. I have no disposition to be arrayed against it. Its prosperity is identified with the State, and near to the interest of every property holder in it. In pointing out what I conceive to be errors of management, it is plain that they are such as any non-resident board would be likely to fall into, if not guarded by an able, experienced and practical resident chief administrative officer. If other defects exist, they may be traced directly to the management, who have, I think, yet to learn that a long line of railroad, with a magnificent land grant, is, nevertheless, dependant for ultimate success upon the ablest administrative talent, that can be obtained.

Respectfully, yours,

CHARLES M. DU PUY.

A LOAN EXPECTED.—Mr. P. G. Van Winkle, President of the Northwestern Virginia Railroad, states that Mr. Powell, the representative of the British stockholders in the Marietta Railroad, has returned from Europe from a successful negotiation for a loan of money wherewith to build the connection between Parkersburg and Marietta, and place the road in good order. The loan, it is said, amounts to nearly \$300,000.

SOUTHERN PACIFIC RAILROAD.

In conversation with an intelligent Director of the Southern Pacific Railroad, during the past few days, we learn that the President, Dr. FOWLKES, and his associates, do not entertain the remotest shadow of a doubt of their success in overthrowing the iniquitous "Trust Deed" sale, as soon as the proper courts assemble in which to take legal action. In the mean time, for the purpose of better getting at what is the wishes of stockholders, they have issued the following notice of a meeting to be held at Louisville. This is as it should be. Let the stockholders assemble, give them good and timely notice, and then let them decide the ways and means of obtaining, defending, and improving their own property, and who they will entrust with the management of their affairs.

Let every stockholder go to the meeting, determined to sift things to the bottom, to find out who has committed frauds, if any, and be prepared to give well digested advice and counsel (and aid, if need be,) in redeeming this great enterprise from its present thralldom.

To the Stockholders of the Southern Pacific Railroad Company of Texas:

A General Meeting of Stockholders will be held in Louisville, Kentucky, on the 24th day of August next. Business of great importance will be brought before the meeting, demanding the attention of all interested. The enterprise promises all that has been claimed for it by its most enthusiastic and extravagant advocates; its past management has been marked by errors of the grossest character, but it may yet, by wise counsels and good management, in future be made to meet the largest expectations of its friends. This is "the shortest, best and cheapest route" connected by railway, of the Atlantic and Pacific Oceans. The press throughout the country will render this enterprise and the scattered Stockholders over twenty six States of the Union, a great service by noticing this call for a Convention of Stockholders, on the 24th day of August, in the city of Louisville, Ky. JEPHTHA FOWLKES,
President S. P. R. R. Co.

CEDAR VALLEY RAILROAD.

At a meeting of the stockholders of the Chicago, Iowa and Nebraska Railroad, held at Waverly, Iowa, the following resolution was adopted:

Resolved, As the sense of this Convention that an organization be now formed under and in pursuance of the statutes of Iowa, as an incorporation, for the purpose of surveying, locating, constructing, maintaining and operating a railroad along the Cedar Valley, between Cedar Rapids and the Minnesota Line, and that such association be so framed as to give to the different interests in the great through line from St. Paul to Chicago, a fair representation, and that the Board of Directors shall consist of twenty-one persons; two of them shall be resident at Chicago, as representing the interest of the Galena and Chicago Union Railroad Co., one in Boston, one in the State of New York, one at Clinton, Iowa, as representing the C. I. & N. R. R., one in Minnesota, representing the M. & C. V. R. R. Company, and fourteen along the line of the road, two being selected from each county, and the remaining Director to be selected at large.

The meeting remained in session two days. The articles of incorporation were adopted and the following Board of Directors elected:

Linn—S. C. Bever, Geo. Green; Benton—J. C. Traer, Alex. Runyon; Black Hawk—Sheldon Fox, Geo. W. Couch; Bremer—W. P. Harmon, R. Morehouse; Chickasaw—John Bird, Albert Albertson; Floyd—G. G. Reiniger, Chester Butterfield; Mitchell—E. M. Down, S. B. Chase; New York—L. B. Crocker; Boston—C. A. Lombard; Clinton—

Milo Smith; Chicago—Chas. Walker, Wm. J. McAlpine; Minnesota—Franklin Steele; Selected at large—J. B. Peat.

At a subsequent meeting of the Board, Hon. L. B. Crocker, of Oswego, N. Y., was elected President of the Company, and Hon. Wm. Harmon, of Waverly, Iowa, Vice President. W. W. Walker, of Cedar Rapids, was appointed Secretary; S. C. Bever, of Cedar Rapids, Treasurer; and Milo Smith, of Clinton, Consulting Engineer.

THE SALE.

The following very pertinent remarks are from the *Marshall Republican*. They have a tendency to explain how the "milk came in the nut."

How will it be explained, that, in this deed of trust, the President and officers are made preferred creditors? Can they defend the action of the President by which claims for stock were converted into a moneyed indebtedness and incorporated also as preferred claims. In December the President announced that arrangements had been made to satisfy the claims under the deed of trust, and it appears from subsequent arrangements that \$50,000 was the amount required by the first of April. Why did not Mr. Yerger pay his stock subscription of \$30,000 which would have rendered the deed of trust unnecessary or afforded subsequent relief? He not only did not do this, but we have seen letters addressed to parties from whom the Company expected to receive large sums of money, written under the authority of the President, advising them not to pay. Every one must see that it would not be a very easy matter to raise money under such a deed of trust, and with letters addressed to parties not to pay, it would be impossible. And at the very time when the company was in this embarrassing condition, we find a receipt of which the following is a copy:

"Received from Geo. S. Yerger, Esq., President of the Southern Pacific Railroad Company, Six Hundred Dollars, on account of my commissions as Trustee under the Deed of Trust, executed in the city of Marshall, on the 19th of October, 1857. JOHN K. YEEGER.

"New Orleans, May 8, 1858."

A receipt for commissions on the sale, before Mr. John K. Yerger's advertisement had made its appearance in the *Marshall papers*!

How is all this to be explained? And whether true or false, do these facts not justify the belief entertained abroad, that the sale was a fixed and foregone conclusion, which no management within the range of possibility could avert?

But if these are insufficient, they are strengthened by the attempt to prevent the publication of the deed of trust, after it was placed on record, and the passage of a law at the last session of the Legislature, intended to legalize such sales.

The property was advertised in the *Marshall papers* on the 8th of May, and the sale took place on the 1st of June.

What were the circumstances connected with that sale? Was not an arrangement made, in advance, before the sale (the parties intending to buy finding that they were not likely to have any competitors,) that the property was not to sell for over \$40,000? Did

not one of the Trustees object to the arrangement on the ground, that the commissions would be too small, and was it not compromised by an agreement to pay commissions on \$250,000? What was the reason of this? Was it to avoid the question of personal liability? Was it not announced that the sale was for cash, and if not paid in *thirty minutes*, the property would be resold at the risk of the purchaser? And, at the very time, this announcement was made, was it not an understood matter, that Col. Long was to receive an indemnification bond? Did he not insist upon it, as a *sine qua non*? How much cash was paid? Was that not a matter regulated entirely by the parties in interest?

Public rumor gives an affirmative answer to all these questions. If untrue they can be denied. If true, do they not furnish sufficient evidence to condemn this sale, legally and morally?

But we contend that the deed of trust, outside of all this array of evidence to condemn it, is valueless for three considerations. First, because the Directors had no legal authority to make it. The law of the last session of the Legislature provides, that before a Deed of Trust can be given, it must be authorized by the by-laws of the Company, which must be sanctioned by two-thirds of the stockholders. Secondly, that without such a law, a franchise can not be alienated. And thirdly, no incorporation possesses the right to prefer creditors.—*Marshall Republican*.

COUNCIL BLUFFS AND ST. JOSEPH RAILROAD COMPANY.

At a meeting of the Stockholders of the Council Bluffs and St. Joseph Railroad Co., held in Council Bluffs, on Monday July 12th, 1858, L. W. Babbitt was called to the Chair, and S. S. Curtis appointed Secretary.

The Reports of the Board of Directors and of the Chief Engineer were received.

From the Report of the Board we learn that the organization of this Company was made on the 18th day of May, 1858, at which time the present Board of Directors came into office.

The Board at once proceeded to the discharge of their duties. H. C. Nutt, Esq., was elected Chief Engineer, and, with but little delay, proceeded to make a preliminary Survey of the route. For the result of his labors and calculations, we refer you to his elaborate and excellent Report herewith submitted. The Report abounds with such facts, observation, and information, as must be interesting to all who desire a knowledge of this important work.

The books have been open for the subscription of stock since the first organization of the Company, and, though but little exertion has been made to obtain subscriptions, yet about 600 shares (sixty thousand dollars,) have been subscribed by persons who, in many instances, with difficulty, found the Stock-book in the hands of some one of the Directors. We are satisfied that, with proper exertion, the subscription of Stock by individuals may be increased to the sum of three hundred thousand dollars.

The indications in the counties along the line of the Road and in the adjoining counties in Nebraska, are, that no one county will refuse to subscribe Stock, when called upon, to an extent which each county may deem its proportion. Already public meetings have been held in many localities, pledging themselves, by resolution and otherwise, to such a policy. The counties in Iowa, having Swamp Lands to dispose of, and which they are authorized to do by a late act of the State of Iowa, appear willing, at any time, to grant them, or the proceeds, to aid in the construction of this Road. We have not, until now, progressed far enough

to ask these counties to pledge themselves by a direct vote of the people, to any sum as a subscription to the Road, but have, as a basis for our conclusions, the general manifestations of interest in behalf of the Road by those whom it will benefit, and by the citizens of the counties along the route.

The counties of Harrison, Monona and Woodbury, being immediately North, and the counties in Nebraska opposite, feel a deep interest in the construction of our road, and are anxious to organize a Company for its continuation to Seargent's Bluffs and Sioux City. The Swamp Land Fund of these counties is very large, and, if granted for the purpose, sufficient to grade the Road through their limits. It is the wish of the Directors to see the organization of such a Company, and an early construction of the Road, thus (making in connection with our own,) the line complete through the entire Western front of the State, and giving the population of the Missouri Slope, on both sides of the River, a connection, not only with the South, but also with the East, by the six great lines of Railroad extending from the Mississippi to the Missouri River.

Relative to the line of the road the Chief Engineer says:—As surveyed, it commences at the South Corporation line of the city of Council Bluffs, at the S. E. corner of Section 1, T. 74, R. 44, (which point is some two miles South of the business portion of Council Bluffs, and the same distance from the River opposite Omaha City,) thence South, through St. Mary's and Pacific City, to a point opposite Nebraska City, N. T., thence South-easterly to the State line of Missouri, at a point some two miles West of the town of Hamburg, Fremont Co., Iowa, and about one mile north of the "Narrows," between the Missouri and Nishnabotana Rivers.

The characteristics of the route are very favorable for the construction of a Railroad, and my most sanguine anticipations were more than realized in the finding of a feasible and direct line.

The most important consideration in determining the route, was to select such an one as would be the shortest and most feasible, with particular reference to obtaining a line that should be upon ground least subject to overflow from the Missouri River.

The line selected will compare favorably, in regard to alignment, gradients, light work and good material for road bed, with any of the Railroads in Iowa, Missouri or Illinois, as will be seen by reference to the Maps, Profiles, Estimates, &c., herewith submitted.

The whole distance of the line surveyed, is 47 94-100 miles, or 300 feet less than 48 miles; which, upon final location, can be 95 per cent. straight, and the balance with no curve of less radius than 5,730 feet—which, for practical purposes, is equal to a straight line.

The gradients, which are about one-half level, and of the balance, none will exceed three feet per mile, are unsurpassed in any country—the total fall from Council Bluffs to the State line being less than 75 feet.

There will be no cut upon the line, and no 'fill' to exceed 9 feet. The road bed for most of the line will be made from the sides, of material very suitable for such a purpose, and much better than I expected to find in the "Missouri bottoms;" in fact, it is equal if not superior to upland prairie for holding the superstructure and to avoid washing.

There will be a short distance, near the State line, where the material is more sandy, and will need to be covered, either with soil or gravel, to prevent washing. Gravel of a superior quality, if I may judge from what is open, and in unlimited quantities, can be had in Mills county, near the line of the road.

The grade has been so arranged that the track will be from 3 to 7 feet above the surface

of the ground, and from 3 to 6 feet above extreme high water mark, at such places as the line passes through overflowed lands.

One of the largest items in the construction of the road will be to secure 'water-way' enough at such points as the line will cross overflowed lands, so that the road shall not act as an immense dam, or the track be submerged, at such times as the Missouri River shall overflow her banks.

To guard against this, the grade has been established, as before mentioned, from 3 to 6 feet above extreme high water mark, and the estimates made accordingly.

To provide sufficient 'water-way,' it will be necessary to build about two miles of trestle-work and piling. These will in no case be over 10 feet high, and in but two instances over 6 feet—making work both easy of construction and durable in its character. The above distance of two miles will be distributed over the whole line, and includes crossing Mosquito and Keg Creeks, and the outlet of Holloway's Lake, in Fremont county. The longest distance, at any one place, is 2000 feet, in the vicinity of Willow Slough, between Council Bluffs and Mosquito Creek.

The following is the summary of estimates to complete the entire line.

Earth Work.....	\$149,707 50
Piling and Trestle Work.....	117,000 00
Ties, delivered.....	76,032 00
Extension at Council Bluffs.....	10,000 00
Superstructure, 50 miles, at \$8.155 per mile....	407,750 00
Turn-outs, Side Tracks and Fixtures, 2 miles....	32,000 00
Stations, Engine Houses, Turn Tables, Machine Shops and Water Stations.....	35,000 00
Road and Farm crossings.....	2,500 00
Ballasting Road bed.....	25,000 00
Grading Depot Grounds.....	5,000 00
Incidentals and Engineering.....	20,000 00
Making a total of.....	\$879,989 50
Add, for contingencies, to that amount	87,989 45
Equipment.....	98,100 00
	\$1,066,088 95

Total cost for Road and Equipment, being, without Side Tracks, 52 miles long, or less than an average cost of \$20,000 per mile.

In the above, however, I have made no estimate for right-of-way or fencing. In regard to the first, we have obtained the same, part of the way, gratis, and hope to secure the balance upon the same terms. With those exceptions, the estimates are full and complete.

After the adoption of the reports, the election of the Directors for the ensuing year, being next in order, the chair appointed Messrs. Cochran and Everett, tellers. The following gentlemen were declared duly elected Directors for the ensuing year:—Enos Lowe, S. F. Nuckolls, Benjamin F. Rector, J. W. Coolidge, L. Nuckolls, L. W. Babbitt, Jas. A. Jackson, J. D. Test, and Addison Cochran.

GOLD AND SILVER.—From a paper laid before the House of Commons, the imports of gold and silver for seven years ending with 1857, and the exports for the same period, were as follows:

	Gold.	Silver.	Total.
Import.....	\$130,000,000	29,870,000	159,870,000
Export.....	22,560,000	56,670,000	79,170,000
Excess im't of gold.....	\$107,500,000		80,700,000
" silver export.....		26,800,000	80,700,000

The export of silver was to India and China. For the six months of the present year the exports of silver to India are £2,933,845 against £3,574,349 same time last year, showing that silver is now again accumulating in Europe, and the movement of the large banks shows some signs of returning business.

FOG AND RAIN IN THE MOUNTAINS.

(Continued.)

BY DAVID CHRISTY.

Fog and Rain in a Cave—Form of the Mountains of North Carolina—Their Bells—Production of Clouds and Rain—Measurement of Mountains—A Day among the Clouds—Their Movements—A Rainbow—Joanna's Ball—Remarkable Exhibition of Fog—Reflections upon it—Philosophy of Clouds, Rain, and Fog—Origin of the Remarkable Fog—Its Movements South—Its Dissolution—North Carolina as a Home for the Invalid—Water-Spouts.

From this brief statement of the general principles governing the production of fogs and clouds, it will be apparent that the higher portions of the mountains of North Carolina must be refreshed by frequent rains. The elevated *bells*, ever clad in mantles of cold air, stand, as so many custom house officers, to exact tribute from all the currents of air laden with vapor, from the warmer regions below, which attempt to sail over their summits. These currents of air can not but pause, when richly freighted, to divide their treasures with the thirsty soils and mountain springs. And even when they are lightly burdend with vapor and no rain can be condensed from them, these passing currents often yield copious clouds of fog, covering the vegetation with moisture and promoting its more vigorous growth.

Nor are the mountain-summits alone in the exactions they make upon the moving atmosphere for its vapors. The mountain-bases, all along the rivers and larger creeks, cool the surrounding atmosphere during the night, while the waters of the streams, retaining their warmth, send upward a plentiful evaporation. The vapor which is thus formed, rising into contact with the overhanging colder air, is condensed into fog and floats above the streams till the morning sun sets it in motion, or dissipates it by increasing the temperature of the air along the mountain sides.

The phenomena of the fog at Clayton, can now be easily explained. The Little Tennessee river takes its rise in Rabun Gap and runs north-west. By the junction of several large creeks, heading in the Blue Ridge, the river, soon after emerging from the mountains, becomes quite a considerable stream. It is walled in on each side by mountains of 1,500 to 2,500 feet, in height, which extends northward, as cross-ties, from the Blue Ridge to the Smoky Mountain. These mountains are covered with forest trees from the base to the summit. The sun, during the hottest hours of the day, teems down its rays into the valley, and imparts a great amount of heat to the waters of the river as well as to the rocks among which it runs. The temperature of the water is thus kept up during the night, while, at the same time, the surrounding mountains cool the overhanging air. The vapor which rises rapidly from the heated water, coming into contact with the cold atmosphere above, is converted into fog. As the sun rises in the morning, his rays at once act upon the air south of the Blue Ridge, where no obstruction exists; but his heat can not affect that of the narrow valley of the Tennessee till the sun attains a sufficient elevation to overcome the altitude of the mountain upon its eastern side. The rarefaction of the atmosphere on the south side of the Blue Ridge, while that of the Tennessee valley remains at a lower temperature, produces a current of air from the north to the south, that bears the fog along with it through the gap. But here the increased heat, expanding the air in the globules of vapor composing the

fog, bursts the bubbles, and the fog is dissolved by absorption into the warmer atmosphere as transparent vapor.

Such phenomena as those of the Clayton fogs, though rare, are not the only instances in which the accumulating clouds of one district, borne along by the winds, are dissolved in another, and may again reappear in a third. Some years since, on the coast of England, there occurred an instance of the appearance and disappearance of a cloud with its reappearance again at a point not far distant. It came floating onward toward an arm of the sea, where it disappeared at the moment of coming above the water. On, and on, it came, for hours, but seemed to make no progress beyond the margin of the sea. It was soon observed, however, that the cloud was re-forming on the opposite coast, and continued, as long as the first cloud lasted, to float onward from that point, at a rate of speed equal to that of the first from which its vapor was derived. The cause of this remarkable occurrence is to be found in the fact, that the atmosphere, over the arm of the sea, was warmer, and had less humidity than that of the lands on either side of the Channel.

It frequently happens that clouds hang around the summits of mountains, though the particles which compose them are continually changing. An example of this occurs upon the St. Gothard, a mountain in Switzerland, about 6000 feet above the sea. Dark, heavy clouds, that form on one side of the mountain, are frequently seen passing rapidly over its summit, and descending in dense masses into the vale of Tremola on the opposite side, where they are immediately dissolved by the warm, dry air into which they are precipitated.*

The vapor which rolled through the notch into the cove, noticed in the first part of this article, had, doubtless, formed the night previous in the valley of Cheoah river, which lies directly to the westward. Overshadowed by the mountains, the atmosphere of that river must have been cooler than that of the cove, into which the sun was brightly shining. Two masses of air, both of which must have been saturated with vapor, being thus brought into contact, the temperature was diminished and the excess of moisture precipitated.

And now, kind reader, allow me to say, that your dyspeptic friends, if once settled among these mountains, would soon be restored to health. Some have tried it with abundant success. The water from these crystalline rocks is wholly destitute of lime, or so nearly so that molluscs in the rivers can not construct their shells, and are, consequently, very rarely to be found. There is no stagnant water, hereabouts, in ponds and marshes, to produce malaria. The water of the springs is as clear as crystal, except when rendered grumly by dashing rains, and is far sweeter and more palatable than the best filtered water of the lowlands. Send a dyspeptic to a Water-cure establishment, if you will, to take his daily rounds in drinking cold water, and walking his one mile or six miles per day to keep from dying: feed him on bran, bread and slices of bacon side, lest he overtask his digestive organs: you might as well send him to the tread-mill for exercise, and put a box of bran before him to satisfy his hunger, as though he was a blind horse. Send your dyspeptic friends to such places if you will; but I shall not do so with mine. I shall place a gun in his hand, and,

if necessary, give him a horse to carry him to the pathways of the deer in these mountain-lands. The hounds shall accompany him, and, coursing the forests, will start the noble buck and give him chase. As the animal dashes along its wonted route, to escape the pursuers, I shall not ask my invalid friend to dismount and be prepared for the shot as the game passes. He will do this almost by instinct; and if a wound is given, not instantly fatal, I shall not instruct him to give chase along with the dogs, to be in at the death. He will do this involuntarily, and will run a mile or two without thinking of his feebleness. When success has crowned his exertions, I shall not prescribe cold water; he will soon seek the mountain stream and drink of it plentifully. When he reaches home, with his buck before him on his horse, and an appetite created by the exercise and excitement of the scenes through which he has passed, I shall not set before him the rude fodder of the *Grahamite*. His knife will soon supply him with steaks of the venison, and a spit of wood will serve to cook it in the blazing fire. His blood now coursing freely in his veins, will carry with it the elements of digestion, and a hearty meal of the wild meat will sit lightly upon his stomach. A routine of such sports, amidst turkeys, deer and bears, all of which abound in these mountains, will rejuvenate almost any man not radically diseased.

In this connection another phenomenon, occurring in the mountains of North Carolina and Tennessee, may be noticed. It is not one of the peaceful nature of the Fog and Rain, but, though limited in its range, must be terrific beyond conception. An eye witness describing one of these scenes to the writer, conveyed a most vivid impression of the fearful character of the elemental strife occurring on such occasions.

Once or twice in a generation, perhaps, a *Water-spout* bursts upon some elevated point of a mountain. Previous to its descent, the clouds are seen moving to and fro, and commingling in a confused manner, somewhat as the circling eddies of a whirlpool. When concentrated above or around the mountain's summit, the cloud acquires such a density as to wear the appearance of the blackness of darkness. The roll of the accompanying thunder is deafening and almost continuous, shaking the eternal hills to their base; while the flashes of lightning, following each other in quick succession, afford a glare of glimmering light, nearly as luminous as that of the sun. Then comes a river of waters, dashing down the mountain side, and tearing up, in its resistless progress, earth, rocks and trees, and bearing them to the valley below, or casting them off to either side of the deep chasm which it excavates.

The amount of water, at times, discharged from such clouds is immense, swelling considerable creeks into great rivers. The water spouts of Tusquitta mountain, North Carolina, which occurred many years since, sent down such a deluge of water as to sweep away a mill and distillery which stood in its course, and to create a destructive rise in the Hiwassee river. A like result was produced by the water-spout of the Chilhowee mountain, near Little River, Tennessee, where another distillery was swept away by the descending torrents. No other serious injuries to property are mentioned as resulting from these water-spouts, except the destruction of the two distilleries; a result that few seemed to regret, while others seemed willing to pray

* Brocklesby's Meteorology.

that sufficient water-spouts might now be sent to destroy all the distilleries in the country.

But what is most strange in these water-spouts, is the effects produced at the place of their origin, proving conclusively, that the whole of the descending water, from the cloud, is contracted to one point. Those visiting these localities, soon after the occurrence of the water-spout, found a deep chasm excavated in the earth to the depth of several feet, with its sides as vertical as if dug with the spade. The roots of the trees and plants, beneath the surface, were cut off as squarely as if done with a knife. At the surface, close up to the sides of the chasm, nothing seemed to be disturbed. The shrubs and grass, and even the fallen leaves upon the ground, remained unmoved, as though no running water had come into contact with them. This was the condition of things where the water-spout first struck the earth; and as the excavation, at the point of origin, had a width of but a few yards, the whole volume of the descending water, must have been concentrated within that space, and continued thus contracted till the contents of the cloud were exhausted. In descending the mountain, along the line of the widening chasm, evidences existed that the torrent, in places, had attained a depth of fifty or sixty feet. Its hydrostatic power, also, was often amply demonstrated in the uprooting of the largest trees, and in the removal of immense rocks from the wide avenue it created in its descent. These avenues are now filled up with a growth of pine trees, enabling the eye to trace the course of the flood created by the water-spout, from the summit to the base of the mountains. One of these avenues exists on the western end of the Chilhowee Mountain, at the Little Tennessee river, and is plainly seen at a distance of many miles. The water-spout which produced it occurred since the settlement of the whites in its vicinity.

About sixty or seventy years since, a water-spout burst upon the North Mountain to the westward of Newville, Pennsylvania, carrying destruction in its course. Many cattle and hogs were drowned at the foot of the mountain, where they were confined within enclosures, preventing escape. The largest rocks were torn from their beds, and a deep chasm excavated from the top of the mountain to the valley. Its course can yet be traced by the difference in the trees within it from those on either side. In all respects it resembled the water-spouts of North Carolina.

The philosophical explanation of the causes of these water-spouts, is left for others more conversant with the laws of electrical action, to which, doubtless, their origin must be referred.

SHIP TIMBER FOR THE BRITISH GOVERNMENT.—We understand that the ship Fulmouth, Captain Perry, has been chartered to load timber at Locust Point for Liverpool, destined for the British Government. The order for chartering was through an English gentleman, who, as we lately noticed in company with an official connected with the British Admiralty, made a tour of our Baltimore and Ohio Railroad with the view of examining into the quality of the timber along the line of the road. This new enterprise, we trust, will meet the generous support of our Railroad Directors, as it is anticipated a large quantity will pass over the road and give employment to an additional amount of tonnage. —*Balt. Amer. July 31.*

THE IRON TRADE OF THE WORLD.

The annual production of crude iron throughout the world is estimated at 6,000,000 tons. Of this, Great Britain produces 3,000,000, France 750,000, Prussia 300,000, Austria 550,000, Belgium 200,000, Russia 200,000, Sweden 150,000, the lesser German States 100,000, the United States 750,000, and other countries 300,000.

It is thus seen that one-half of the iron of the world issues from the forges of Great Britain, and that the amount produced in the United States—although large as compared with other countries—is small when contrasted with that of Great Britain. Is this likely to continue? Those who are best informed upon this subject are of the opinion that the most favorable locations are at present fully occupied, and that if the iron trade of Great Britain is destined to a further increase, it must be by bringing into use the iron deposits of Ireland, which have hitherto been, for the most part, entirely neglected.

In the United States on the contrary, the deposits are on so gigantic a scale, and are so universally diffused, that a production such as that at present enjoyed by England would scarcely make an impression on them. Indeed there is no subject which strikes the scientific observer in this country with greater wonder than that of the immense mineral deposits heaped up in the ranges of mountains which traverse the entire length of the American continent, the most useful of which, as well as the most widely diffused, is iron.

England, although the largest producer of iron, is far from making the best. The Russian and Swedish bears a higher reputation, and commands a greater market price. While something is due to the ores of special localities, yet much is referable to a slovenly system, which the abundant materials of England has led them to adopt, and which we have but too faithfully imitated.

Mr. J. K. Blackwell, in a paper read before the British Society of Arts, which attracted much notice, called attention to this subject, and stated that at the Industrial exhibition held in Paris, the iron of other countries was greatly superior to that of England, and that the comparison was by no means calculated to increase the reputation of their manufactures. The manufacture of iron is strictly a chemical process, and the energies of other countries have been directed to the attainment of a high degree of scientific knowledge, in its fabrication, in which they have been successful, and hence the results spoken of by Mr. Blackwell, as manifested at the Paris Industrial Exhibition.

Iron is found in several combinations, as the black oxide, red hematite, brown hematite, brown ore, but by far the most widely diffused and available combinations are the carbonite, brown spar and ispathose ores, and the black band of Scotland. All this widely diffused class is susceptible of two divisions, viz: the crystalline which occurs in beds in primary rocks, and the lithoid which is an incident to coal measures, and is remarkable for the facility with which it may be reduced. It furnishes the basis for nearly the whole of the enormous yield of Great Britain, and is used extensively in France and the United States.

All these are reduced to iron by a process called smelting, and upon the care with which this is conducted the value of the iron greatly depends. It is to this primary process that Mr. Blackwell particularly refers when he gives the continental iron a superiority over

the English. He, who ever, finds that from one cause or another, most of the European States must rather diminish than increase their iron production, confidently turns to England and America as the two great iron-producing countries of the world. If his views of the limited capacity of the other governments of the world to produce iron are correct, it is easy to see that with the vast increase in the consumption of iron induced by European and American railways, and in the domestic arts, the supply will soon fall far short of the demand, and the price will be proportionably enhanced. The available capacity of England is already taxed to its uttermost; all that can be expected from it, is, that the annual production shall not be diminished. In this dilemma, the eye naturally turns to the United States: where nature has piled up, with a more bountiful hand than in any other part of the globe, all the materials necessary for the fabrication of iron. Art has already made many of these available by means of railroads and canals, and is yearly adding to their development. | *Baltimore American*

EXPORTS OF BREADSTUFFS FROM THE UNITED STATES.—The following, from the New York *Shipping List*, shows the export of breadstuffs from the United States to Great Britain and Ireland, since Sept. 1st, 1857:

	Flour, bbls.	Meal, bus.	Wheat, bus.	Corn, bus.
New York, July 20,	701,062	484	4,928,479	1,757,114
New Orleans, " 10,	256,741	....	654,071	963,786
Philadelphia, " 16,	82,449	123	163,632	376,034
Baltimore, " 16,	91,762	....	209,239	254,197
Boston, " 16,	3,683	....	.....	8,020
Other ports, " 15,	22,181	....	128,597	3,920
Total, 1857-58,	1,178,938	607	6,075,217	3,360,251
" 1856-57,	859,929	436	7,363,749	4,653,092
Increase	319,009	121	.....	.....
Decrease .....	.....	.....	1,288,532	1,292,821
Total, 1855-56,	1,411,010	619	6,101,967	6,633,721
" 1854-55,	135,523	553	214,865	6,224,055

TO THE CONTINENT.

	Flour, bbls.	Wheat, bus.	Corn, bus.	Rye, bus.
New York, July 20,	103,781	141,483	10,818	....
Other ports	161,607	145,195	6,030	....
Total	265,388	286,678	16,848	....
Total, 1856-57,	557,518	2,221,756	443,590	216,162
" 1855-56,	633,210	2,359,076	279,909	2,863,727
" 1854-55,	7,756	869	290,960	45,559

ANOTHER BRIDGE OVER THE UPPER MISSISSIPPI.—The directors of the Galena and Chicago Railroad have decided to commence the construction of the Fulton Bridge across the Mississippi river, to connect their Road with the two railroads from Clinton and Lyons, in Iowa, as soon as the stockholders vote their approval of it. The plan proposed is that it be built by an independent company, but under the control and supervision of the Galena Company, and when completed to be leased to them at an annual rental of eight per cent. on the cash cost. The Galena road must have the privilege of purchasing the bridge at cost at any time within five years on giving one year's previous notice. The bridge is estimated to cost \$300,000 and with expense of management and repairs the rental of the Galena Company will be about \$30,000 per annum. It was stated that the revenue of the old Rock Island Bridge, for the last two years, has amounted to about this sum. A special meeting of the stockholders is called to meet in Chicago on the 6th of October next, to decide whether the proposed plan shall be carried out or not.

MONETARY AND COMMERCIAL.

The demand for money has improved steadily since our last, but is not yet equal to the supply. The same caution is, however, still exercised in the selection of names; rates ranges from eight to twelve per cent. for first class; ten being the most general figure; names not regarded as first class meet with much less favor. There is a continued increase in the demand for currency for the interior to move produce and stock, but the supply still is in excess.

Eastern Exchange firm at $\frac{1}{4}$ premium buying, $\frac{1}{2}$ selling; dealers steadily reducing Eastern balances. In New Orleans, but little doing; quotations nominal, $\frac{1}{2}$ to $\frac{3}{4}$ discount buying, $\frac{1}{2}$ premium selling.

But little produce has come forward, but there are indications of greater activity in that line before long. Producers are holding on for better prices.

We give the receipts of grain for the last week compared with that of the same week last year.

	Last week.	Same week last year.
Barley, bush.....	650	338
Corn, bush.....	14,242	15,802
Flour, bbls.....	5,374	1,666
Oats, bush.....	22,074	1,792
Wheat, bush.....	56,878	8,019

Though these receipts are light, they are heavier than in the corresponding week last year; but now there is a surplus of old stock; then the old stock was exhausted.

The New York Commercial Advertiser, of Saturday afternoon, says of the Money Market:

"The Money Market remains in the same languid and lifeless state that has been its distinguishing characteristic for several weeks. There are some symptoms of the approach of the early Fall trade, but the movement is as yet so slight as to have had little or no effect, and we shall have 'to wait a little longer' before things put on any resemblance of activity. Capital continues to press upon the market, and is offered at the low rates previously current, and refused by many of the commission houses, from the impossibility of using it profitably upon any terms. Paper is extremely scarce and in demand in the street at four per cent. and upward, according to the grade, and some lines of short dates are reported to have been taken by the banks at the rate named."

Advices from Europe are not favorable for American produce, the weather has been propitious for crops.

There has been rather more business in American State Securities at improved prices, and an active business in Illinois Central Railroad shares.

At a meeting of shareholders held in London on the 22d, it was resolved to appoint a permanent London committee, and endeavor to make provision for a regular credit in New York, on behalf of the European stockholders. A deputation is to proceed to New York to prevent the Company becoming pledged to further expenditures, without the previous concurrence of the London Committee.

Since the panic of last Fall the Bank of France has increased its bullion £13,536,490, and the Bank of England £10,238,149, or together \$101,000,000.

The New York weekly Bank Statement of Aug. 2d, shows an increase—

In Specie of.....	\$ 197,000
In Circulation of.....	57,000
In Undrawn Deposits of.....	1,040,000
In Nominal Deposits of.....	985,000
In Loans of.....	910,000

The transfer books of the New York Central Railroad Company closed last Monday to reopen on Monday, the 22d of August. The usual meeting for the purpose of declaring the dividend is called for to-day in the City of Albany.

The Brooklyn and Jamaica Railroad Company has declared a semi-annual dividend of four per cent., payable on the 16th of August.

The Bank of the Republic a semi-annual dividend of five per cent., payable August 9.

The Knickerbocker Ice Company announced a semi-annual dividend of five per cent., payable August 10.

The semi-annual interest on the 1st Mortgage Bonds the Cleveland, Painesville and Ashtabula Railroad, on the 1st of August, will be paid at the banking—
Messrs. Winslow, Lanier & Co., No. 52 Wall

The interest due 1st of August on the First Mortgage Bonds of the Terre Haute and Alton Railroad will be paid on and after that date upon presentation of the Coupons at the Company's Office, No. 18 William Street, New York.

The Little Miami and Cincinnati, Hamilton and Dayton Railroad Companies, yesterday, agreed verbally upon the following freight tariff:

BY RAILROAD AND LAKE.

Flour to New York.....	per brl....	90 cents.
4th class " ".....	per 100 lbs 52½	cents.
Flour to Buffalo.....	per brl....	50 cents.
4th class " ".....	per 100 lbs 27	cents.
4th class to Detroit.....	per 100 lbs 28	cents.
4th class to Cleveland and Sandusky.....	per 100 lbs 28	cents.
Flour to do do.....	per 100 lbs 40	cents.

BY ALL RAIL.

Fourth Class to New York.....	57½
Flour to New York.....	1 10

This arrangement to take effect on the 4th inst.

SALES AT THE NEW YORK STOCK BOARD.—Aug. 2.

\$2,000 Virginia 6's.....	99½
2,000 do.....	99½
25,000 Miss. 6's.....	83½
2,000 Cal. 7's.....	86½
8,000 do.....	87
5,000 N. Y. C. 6's.....	89
20,000 Illinois Central R. R. Bonds.....	88
5,000 La C. & Mil. L. Gt. Ba.....	24½
1,000 Mich. S. F. B.....	67½
1,000 Hud. 3d Mt. B.....	68½
45 Shares New York Central.....	85
25 " Harlem R. R.....	11½
100 " Reading.....	51
100 " Hud. River R. R.....	28½
150 " Mich. Cent.....	62
18 " Mich. S. & N. Ind. pref.....	45½
200 " Panama.....	114
25 " Galena & Chicago.....	87½
200 " Cleveland & Toledo.....	37½
50 " Milwaukee & Miss.....	16
115 " Pacific Mail St. Co.....	85
50 " Canton Company.....	20½
50 " Chicago & Rock Island.....	77½
50 " La Crosse & Milwaukee.....	4½
60 " Mich. S. & N. Ind.....	46
200 " Erie R. R.....	17
100 " Del. & Hudson C.....	99½

LA CROSSE AND MILWAUKEE R. R.

The following articles sufficiently explain themselves.

OFFICE LA CROSSE AND MILWAUKEE R. R. CO., }
No. 480 BROADWAY, ALBANY, July 30, 1858. }
To the Holders of the Land Grant Bonds of the La }
Crosse and Milwaukee Railroad Co. }

In accordance with a resolution of the Board of Directors of our Company, passed this day, I hereby give notice that the interest to become due on the Land Grant Bonds on the 1st of August next will not be paid.

It is with deep regret and mortification that I am compelled to make this announcement. In justification, however, of the action of the Board of Directors, I desire to say that a Committee of our Board was appointed several weeks since whose duty it was to negotiate for funds to provide for the payment of these coupons. This Committee did make satisfactory arrangement with parties for the amount necessary, and so reported to the Board of Directors; whereupon the Secretary was directed to give public notice that the interest would be paid on the 2d day of August next. The recent action of the Governor of Wisconsin, adverse to the interests and rights of this Company, so affected our credit that the arrangement previously made by them for the required funds was frustrated, and the Committee now find themselves by unable, any justifiable means, to raise the required sum of money.

I deem it my duty further to state that the construction of the road has been faithfully continued by the contractors, and it is confidently expected that within the next fifty days cars will run regularly from Milwaukee to La Crosse, on the Mississippi River.

I am also perfectly satisfied, from a recent visit at Washington, that the Land Depart-

ment will recognize the vested right of the Company to 230,400 acres of land certified by the late Governor of Wisconsin, in pursuance of the Land-Grant act—so that these Bonds, limited to \$4,000,000 by the modified trust deed, are secured by a first mortgage upon these lands, and a first mortgage upon the Railroad from Portage City to La Crosse, 105 miles, which is universally estimated as one of the best paying routes west of the State of New York. These facts are merely stated by me to prevent a sacrifice by holders at the present ruinous prices.

N. P. STANTON,
Pres't L. C. & M. R. R.

OFFICE LA CROSSE AND MILWAUKEE R. R. CO., }
27 William St., New York, July 13, 1858. }

Sir:—A committee has been appointed by our company to attend specially to its financial affairs. Our first desire is to call in all those bonds generally known as "corruption bonds."

Wishing to avoid any open demonstration in reference to the transaction with which your name, among many others, has been associated, I have simply to request that you will return to the company the bonds you are reported to have received while a member of the Wisconsin Legislature.

Your immediate attention to this matter is expected.

Yours, &c.

OFFICE LA CROSSE AND MILWAUKEE R. R. CO., }
27 William St., New York, July 13, 1858. }

Sir:—A committee has been appointed by the Board of Directors of the above company for the purpose of collecting in the bonds familiarly known as the "corruption bonds." I trust you will at once see the importance of returning the bonds you received to the company.

Respectfully, yours, &c.

PIKE COUNTY RAILROAD.—Mr. S. D. Barnes the Chief Engineer of the Pike County Railroad, who was in this city yesterday, informs us that the work on that road has been resumed, and that the work already done, was not materially injured by the recent high water, and that the work will be pushed to a speedy completion. The grading between this place and Barry, will be finished in about two months.

Mr. B. also informs us that they are now engaged in erecting a magnificent bridge, 600 feet in length, over Hadley Creek, and will be finished in sixty days from this time.—
Hamilton Messenger.

TEXAS CENTRAL RAILROAD.—The Houston Telegraph says that there are about one hundred and fifty hands at work on the third section of the Houston and Texas Central R. R. The next ten miles will very soon be ready for the iron. The completion of this section will put sixty continuous miles of road in operation. When the remaining fifteen miles of the Galveston road, between Virginia Point and Houston, are completed, which will be in time for the fall business, there will be more than one hundred and thirty miles of railroad connection between Galveston Bay and the interior.

IOWA CENTRAL.—It is said that iron for forty miles of this road has been purchased, and now on its way.

A WILD CAT BANK CLOSED.—The Bainbridge Argus of the 21st, says: "We have been informed by the acting Cashier of this Bank—Southern Bank of Georgia—that every dollar in this bank had been paid out, and the vaults are minus of either specie or bills on other Banks. He consequently closed doors on Monday, and left in the stage on Monday night."

VALUE OF RAILROADS.—The Virginia and Tennessee Railroad is 204 miles in length, and it cost \$7,000,000. In 1850 the taxable value of the land in the counties through which it passes, as taken from the census, was \$28,942,947; and in 1856, the State assessment makes it \$54,917,229, or an increase in six years of \$25,365,558. This sudden increase is alone the result of an internal improvement which has cost only \$7,000,000.—*Bnlt. Obs.*

THE INJUNCTION AGAINST THE BALTIMORE AND OHIO RAILROAD.—The *Wheeling Times* states that the writ to the Agent of the Baltimore and Ohio Railroad Company to appear at the August rules of the Circuit Court for that county, and show cause why an injunction should not be issued at the instance of the city of Wheeling, restraining the Baltimore and Ohio Company, its President and Directors, from paying out any more of its funds in behalf of the Northwestern road, or from working that line, will come up for argument at the August session of the Circuit Court. This movement on the part of Wheeling may mean something, but so far the only feeling excited by it here has been one of amusement.—*Balt. Amer., July 29.*

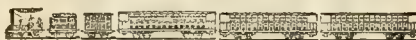
THE MANUFACTURES OF NEW YORK.

The *Courier and Enquirer* has compiled from the Report of the New York Census of 1855, a summary of the condition of the manufacturing interests of the State, which makes the total number of establishments 24,833; number of persons employed, 214,899; capital invested, \$106,350,000. Cash value of manufactures, \$317,428,000. The amount of capital invested in cotton factories is stated at \$4,250,600, and the value of articles manufactured \$4,261,000; in grist mills capital invested \$10,173,000; value of manufactures, \$51,531,000; invested in saw mills, \$9,892,000; value of manufactures \$14,655,000. There are 863 tanneries in the State, the capital of which amounts to \$3,336,000, and the value of articles manufactured to \$15,642,000. Value of articles manufactured in tailor shops, \$11,482,000; value of sugars and syrups refined, \$12,176,000; tobacco and segars manufactured, \$2,261,000; hats and caps, \$4,029,000; agricultural implements, \$1,737,000; iron of various kinds, about \$12,000,000; gas, \$3,279,000; bakeries, \$3,356,000; breweries, \$4,448,000; camphine, \$1,670,000; distilleries, \$8,681,000; salt, \$1,486,000; ship building and rigging, \$6,364,000; coach and wagons, \$5,005,000; boots and shoes, \$6,063,000.

☞ The Charleston and Savannah Railroad has so far progressed, that the President officially announces that the locomotive will run to the "thirtieth mile" station by the middle of September.

GRAND TRUNK ROAD TO DETROIT.—The work on this Road as we have already announced, is under contract and is to be speedily prosecuted. The company buildings on Point Edward, in Canada, opposite Fort Gratiot, are being rapidly put up, and the work all along the line is being rapidly pushed. The surveys have been completed so as to enable the Directors to decide upon the route between Port Huron and Detroit. As the road leaves Port Huron, it will run in a west by south-west course—an air-line until it reaches the north-east corner of section 10, township of Columbus. Thence in a south-westerly direction, crossing Belle river about $1\frac{1}{2}$ miles north-west of Cross; making a slight curve to the East, in the north-east corner of Section 2, township of Lennox, Macomb county, and thence south-west by south curves to Mt. Clemens, passing a short distance west of that village, and thence an air-line to Detroit.—*Detroit Tribune.*

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE. INDIANAPOLIS AND CINCINNATI SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

to 9 P. M. H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, at Broadway, New York.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON, feb5-tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees. July 14, 1857. jy23-1m

D. M. CARHART.

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART, Box 1851, Cleveland, Ohio.

oct29-6m

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, {
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Felloe Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.

No. 98 Pearl Street, Cincinnati

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL SYSTEM," patented in Europe and America, by STRUPTENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

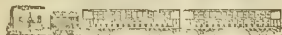
Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

Timber arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati, Ohio.

Norris' Locomotive Works.

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.

June 27. RICHARD NORRIS & SON.

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

6 7 inches outside diameter, cut to definite length, as required.

WROUGHT IRON WELDED TUBES.

From 1/2 to 5 inches bore, with Screw end Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 269 South Third St.,

PHILADELPHIA. 1204

STEPHEN MORRIS, CHAS. WHEELER, JR.,
THOS. T. TASKER, JR., S. F. N. TASKER.

RAILROAD IRON.**LOCOMOTIVES.**

4,000 Tons rails, 56 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rail 55 lbs. per yard. Also several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '66-2m.] A. H. GOODMAN & CO.,
No. 7 Wall-st., N. Y.

OLD STAND.**Railroad and Car Findings.**

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanthorns.

ENAMELLED HEAD LININGS,

Brass and Silver Trimings.

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited.

ALBERT BRIDGES.

Of the late firm of Bridges & Bro.

JOEL C. LANE

S. C. THOMPSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars, Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market St.,

102 1/2 NEWARK, N. J.

**MOSELEY'S
TUBULAR WROUGHT IRON****ARCH BRIDGES AND ROOFS.**

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always with Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

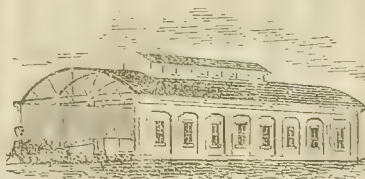
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2000 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 407 West Third Street, in this city, four different specimens of our Roofs, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracts.

Office, No. 65 West Third street, Cincinnati, O.
May 13. MOSELEY & CO.

DAVENPORT, . . . M. D. WELLMAN, . . . C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscribers, late of the firm of Davenport, Bridges & Co., Pittsboro, Mass., having associated themselves with Messrs. Wellman and Russell, under the above name, would respectfully solicit orders for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business, and having secured the best of workmen from the Car Factory in Cambridge, Mass., they could build the perfect car that can be given in all work entrusted to one of us.

We have now on hand the best of dry White-Oak with which we can build Cars as cheap and as well as any other establishment in the States.

Feb. 1674 JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

ING, HUDGSON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND.

Consulting Engineer.

64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELIET, Jr., Civil Engineer.
No. 248 H Street, Washington, D. C. April 2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine.

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about

lbs. per yard, "Eric" pattern, of best

quality Welsh make, now ready for delivery, for sale by

Feb. 1575. JOSE. LIVINGSTON & CO.

Mar. 25, 71. 9 South Wallen St., N. Y.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

☞ FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:40 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

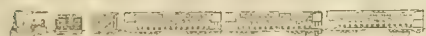
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 4:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Supt. Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THESE machines are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, etc.

Office No. 15 Walnut street Cincinnati, Ohio

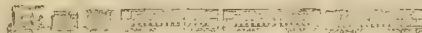
LEE & LEAVITT

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 16-18, Corby, Gossin & Co's make, for sale very low by
TRABER & ALBERG,
7 Public Landing.

LITTLE MIAMI AND COLUMBUS AND XENIA



RAILROAD.

ON AND AFTER MONDAY MAY 10TH 1853. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

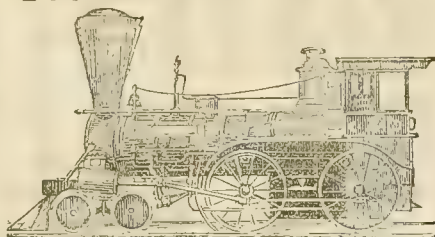
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

MOORE & RICHARDSON.

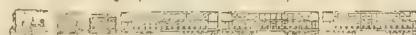
1853 1858.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars,

OHIO AND MISSISSIPPI

(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Main streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

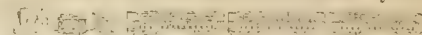
WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. Large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
Jan 8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1853.

Cincinnati, Hamilton & Dayton



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & L. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & L. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

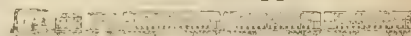
RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:50 P. M. Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

☞ A Steamer leaves Racine for Chicago every evening.

☞ Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Supt.
Racine, May 13, 1857. my21

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We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook headed Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Railroad men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

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POOLE & HUNT,
Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

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ATTORNEY AT LAW,
OFFICE:
N. W. Cor. Walnut & Sixth streets,
my21 CINCINNATI

SCHENECTADY
Locomotive Works,
SCHENECTADY, N. Y.

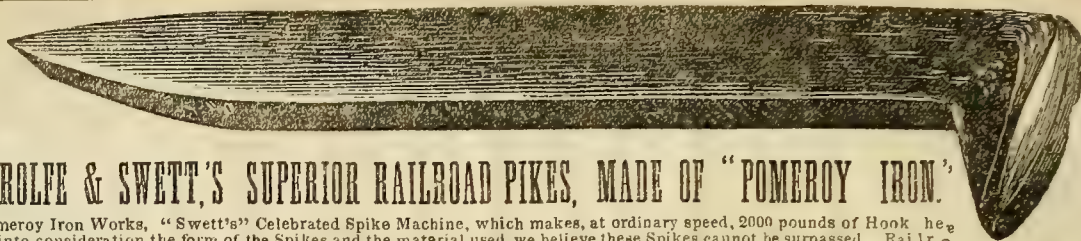
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RAILROAD MACHINERY

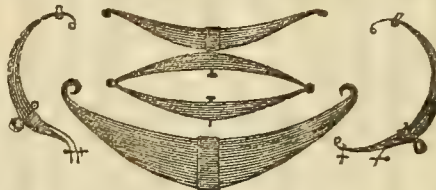
generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

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WALTER McQUEEN Sup't., Aug 16



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It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered by the Engineer.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....AUG 12, 1878.

Railroad Record

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NEW YORK STATE CANALS.—Canal tolls received during the fourth week in July, 1858.	\$83,246 44
Tolls received during the 4th week in July, 1857.	105,717 58

Decrease in 1858.	\$22,372 14
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Tolls received during the month of July, 1858.	\$278,916 18
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Tolls received during the month of July, 1857.	314,818 18
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Decrease in 1858.	\$35,902 00
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Tolls received from the opening of navigation to and including the month of July, 1858.	\$915,131 37
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Tolls received from the opening of navigation to and including the month of July, 1857.	\$35,980 48
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Increase in 1858.	\$79,150 89
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Increase in 1858.	\$79,150 89
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Increase in 1858.	\$79,150 89
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LITTLE MIAMI AND XENIA RAILROADS.

For some reason we have not till recently met with the last Report of the Road, from Cincinnati to Columbus. It is now about four years since the Little Miami, and Columbus and Xenia Roads entered into a contract with each other, that these roads should be *worked and managed together*. There were many good reasons for this arrangement, and among others this; that the Little Miami Road owned about one-third the Stock of the Xenia and Columbus Roads, and, therefore, had a direct and immediate interest in its management. In fact, the roads are as inseparable as the Siamese twins. At present the roads have two Presidents, JACOB STRADER and WILLIAM DENNISON, JR., (both of them able and peculiarly competent men for such a place), and one Superintendent, J. DURAND, who has acquitted himself very well.

Looking into the details of the Road, we find that its financial operations, in the year, have been as follows, viz :

Receipts from Passengers.	\$570,901
“ “ Freight.	588,121
“ “ Mail Service.	44,139

Aggregate.	\$1,163,161
Total Expenses.	\$664,418

Net Earnings.	\$498,743
--------------------	-----------

The Net Earnings.	43 per cent.
Expenses.	57 “

The proportion of expenses is undoubtedly large; but, in looking into the details, we find \$155,334 charged to the *road bed*, which undoubtedly goes largely towards the permanent structure, rather than expenses.

In referring to the cost of the road, in order to determine the exact per cent. of net profit, we find this result :

Cost, including every thing, of the Little Miami Railroad.	\$4,145,930
Cost, including all, of Columbus and Xenia Railroad.	1,669,000
Aggregate.	\$5,814,930

The net income, \$498,747 was eight and two-third per cent. This is less, than in previous years; but, as there was \$105,000 balance, and about \$1,200,000 of the cost was in six per cent. Bonds, the Companies were enabled to make a dividend.

It appears, from the Report of this company, as well as many others, that the great commercial depression of 1857 had a very serious effect on the business of this road.

An interesting item of the business of this road is, the amount of *agricultural products*, it has carried into Cincinnati. The country drained is about 120 miles in length, by about an average of thirty miles in width, not more than this; that is, about 3,600 square miles. In reality, it is much less; for at the northern part, in the counties of Madison, Franklin, etc., nearly all the products go northwardly—being chiefly cattle, hay, hogs, etc. The products of agriculture carried, by the Road to Cincinnati, are as follows:

Flour.	194,842 bbls.
Corn and Wheat.	656,023 bush.
Whisky.	113,994 bbls.
Hogs.	80,692 No.
Lime.	80,228 bush.
Cattle and Horses.	5,393 No.
Hay.	17,932 bales.
Coal.	1,186,078 bush.

This being a pure *surplus* of a small district of country, proves it to be remarkably fertile and productive.

The passenger traffic of this road has fallen off, in the last two years; but, perhaps, not so much as might have been expected, considering the decline of commercial business, and the competition which exists in many quarters.

The number of passengers carried on this road, was as follows:

Through Passengers.	167,909
Local “	236,135

Aggregate.	404,044
-----------------	---------

The Passenger traffic on these roads, during the last *eight* years, was as follows, viz :

In 1850.	181,710
In 1-51.	268,297
In 1852.	338,854
In 1-53.	476,125
In 1854.	509,744
In 1855.	494,548
In 1856.	478,112
In 1857.	404,044

Since the fall of 1854, the passenger traffic of this line has steadily diminished. For this it is difficult to find a reason, except that a portion of the Western passengers have been diverted to other lines, north of this, such as the Lake Shore Line, and the Pittsburg and Fort Wayne Line. The Ohio and Mississippi Railroad, has been in operation too short a time, and has been too imperfect to test its value as an auxiliary to the Eastern lines. Probably it will produce much greater effect, than is now apparent. But, the greatest auxiliary to the Miami Lines of Railroad must undoubtedly be the Southern lines, extended from Covington to Tennessee. Till this is done, the resources of Cincinnati, and the business of its railroads can never be fully developed. We fear that Kentucky, however, will do but little more in the way of railroads, and that the capitalists of Cincinnati will not see how largely their interests lie in that direction.

SOUTHERN PACIFIC RAILROAD.

Our readers have been kept fully informed of all the transactions of the Southern Pacific, down to the great swindle, which took place under the pretence of a Deed of Trust and a public sale. A meeting of stockholders is called to take place, at an early day, in the city of Louisville. We trust, that it will be fully attended by all *bona fide* stockholders, and we believe that if it is, their property (one of vast value,) may be saved to its real and legitimate owners.

Our grounds for this belief are as follows:

1. It seems to be conceded, and we think justly, that the sale under the Deed of Trust

was worthless, and would be declared void. In other words, the property and franchises will return to the true and real owners. The proceedings were not legal in all respects, and the courts are, therefore, at liberty to invalidate the sale. That they will do so, when all the principles of equity, justice, and honor are in favor of the real owners, we can not doubt.

2. Supposing, then, the sale to be illegal, the property is in the hands of the original Company, and it now remains to be seen, what they will do to make it valuable, and save it from ultimate destruction. This is the problem to be presented at the meeting.

The facts to be presented are substantially these:

First, The Charter and its accompanying property and privileges are (we maintain—as we ever have done,) of immense value. Perhaps, no company ever established in this country, has had so ample an opportunity of acquiring immense wealth, or, in popular language, making a great and profitable speculation. We think this certain.

Secondly, This being so, there is all the inducement which can be presented, to make a strenuous effort to retrieve the affairs of the Company.

Thirdly, To do this, we understand, that some three or four hundred thousand dollars of money must be raised, as liabilities to that amount exist. This is not so large a sum, but that it could be readily raised, if the Company were disembarassed.

Fourthly, To disembarass the Company, and take away all plea of unfairness, in the distribution of stock—two of the largest stockholders, who hold a very large proportion, propose to retire their stock on equitable terms, and this will, no doubt, be done by all the larger holders, unless, perhaps, one or two. A fair representation of the true, *bona fide* stockholders will thus be had, and the Company be disembarassed from foreign and contingent elements. Then this will be the condition of affairs. The Company will have a Charter, franchises, actual property, and prospective wealth, equal to any thing which has ever been presented to any Company. This, however, all rests on the power of the Company to raise enough to meet its pressing needs. Can that, or ought it to be doubtful? We well know the doubts and difficulties which surround the Company, and, indeed, all railroad enterprizes at this time. But, the golden prospect originally presented to the Company still remains within reach, if there be skill and energy enough to grasp it. The offer of Texas, in her grant of land, was magnificent. It can not be supposed she is indifferent to the great work she so ardently desired. Nor can it be supposed she will favor a swindling operation, by which the true projectors and honest stockholders are to be wronged and robbed.

TENTH ANNUAL REPORT OF THE LOUISVILLE AND FRANKFORT R. R.

In the official report of this road for the fiscal year ending June 30, 1858, the President says:

"The accounts of receipts and expenditures shows that the gross earnings of your Road for the year ending 30th June, 1858,—

Have been.....	\$245,749 92
The expenses for the same time being..	136,691 42

Leaving as net earnings for the year.. \$109,058 54

Being \$1,382 less than it was for the preceding year, and is 14 72-100 per cent. on the capital stock, and 7 26-100 per cent. on the entire cost of the road.

"The gross earnings for the year just ended are \$2,714 more than those for the year terminating June 30, 1857. While the aggregate expenses for the same time, exceed those of the previous year \$4,096. This increase of expenses arises from the additional amount of ballast and cross-ties, and the increased sum paid for building water-stations, etc."

The city taxes heretofore paid in July were this year paid in June, and a saving of five per cent. thereby made.

"Out of the net earnings, have been paid the interest on your debt for the year, the bonds which fell due in January and July, 1858, and some of the bonds due in July, 1860, etc."

The following statement shows the financial condition of the Company:

The total indebtedness is—	
319 Bonds, bearing 6 per cent. int., payable half yearly.....	\$319,000 00
200 Bonds of the city of Louisville, 6 per cent. int., payable in New York, assumed by Company.....	200,000 00
Amount of debt due to the State of Kentucky, for right of way, etc. Principal never due, but bearing 6 per cent. int.....	74 519 50
Amount note to James Rudd, part payment Depot Grounds.....	28,096 87
	\$621,616 37
Amount Capital Stock issued and to be issued to this date.....	741,069 41
Total amount debt and stock.....	\$1,362,685 78

Up to the present day the directors have disposed of one hundred and four of the new bonds, and during the present year have taken up fifty of the bonds falling due in July, 1860. They hope thus to be able to begin in January, 1861, to declare regular semi-annual cash dividends.

The total cost of the road has been \$1,502,094 61, while the capital stock only amounts to \$741,069 40, not quite one-half.

The receipts were divided as follows:

Passengers.....	\$131,451 84
Freight.....	108,290 44
Mail Service.....	5,300 98
Rents.....	589 50
Bridge Tolls.....	117 20
	\$245,749 96

At the time of the last Report, little or nothing had been done on the Lexington and Big Sandy Railroad, in which this Company had by vote agreed, on certain conditions, to subscribe for \$100,000 of its capital stock. It is feared that these conditions will never

be fulfilled, as nothing is being done towards the construction of the Road, and nothing more can be done until other arrangements are made for its completion; there will, therefore, be no opportunity for this Company to subscribe.

It is proposed to ballast the whole line of the Road with stone, as fast as the cross-ties are removed, thereby diminishing eventually the repairing and like expenses, and making the Road more pleasant and safer for those passing over it.

The Lexington and Frankfort Railroad, operated in connection with the above, reports through its Superintendent, the receipts from May 1, 1857, to July 1, 1858:

From Passengers.....	\$69,325 33
" Freight.....	54,958 28
" Mail Service.....	2,947 18
" Rents.....	1,230 50
	\$128,471 29
Total Expenses.....	121,225 30
Balance.....	\$7,245 99

THE KENTUCKY CENTRAL.

We mean the First Division; for the Second Division, under General Coombs, has been so well conducted, that it is not commented on.

The Covington & Lexington road, however, is exciting much remark from all parties interested, and from the public. We received an article signed a "Bondholder," too late for insertion in last week's paper. We agree with the writer in regard to the discrepancies in the construction account, and the enormous cost of the work. All this we have long since pointed out in the *Record*. In our article of last January, we stated the main causes of loss and expense. Although the Company has not made, at all clear statements, yet they have furnished facts, which, closely analyzed, disclose their whole proceedings, and the real causes of their difficulties. In March, 1856, reviewing the Annual Report of the Company, we showed that the sum of \$394,757 was wholly unaccounted for. We guessed that it was paid in *discounts*; but this seemed almost incredible; for, if true, it proved that the Company had actually paid *fifty per cent.* on some of their Bonds! Last January, their next report, showed that this was true. The Company actually sold some of their Bonds for fifty cents on the dollar. Others were sold at twenty and thirty per cent. discount. In this manner the road was built by a continual series of sacrifices. From the beginning, this was the case. Now, let us see how the matter stands. On the 1st of January, 1857, the Covington Road had cost \$4,000,000, or something over \$40,000 per mile. Now, of this nominal cost, it is safe to say, that not more than \$3,000,000 actual money was expended upon it. We think not even so much.

What is the condition of things now? The Company acknowledges itself unable to

pay anything. In other words—practically insolvent. What is to be done? The Liens of the 1st and 2d Mortgages, of Cincinnati and Covington, amount to nearly \$2,000,000, and beyond this, there is nothing worth anything. The Stock is nominally \$1,330,000. The floating debt, of various descriptions, \$700,000. What is to be done? The best thing is to liquidate the whole concern, by allowing the holders of floating debt a small per cent., and selling out the road under the early Liens. The elder lien-holders can afford to allow something; for, even at \$3,000,000, the road will pay. It will only require \$450,000 gross to pay seven per cent. on \$3,000,000. Till the cost is liquidated, nothing can be done.

TUNNELING THE ALPS.

It has long been a question among the engineers of Europe, whether the Alps could be tunneled or not. Owing to the gigantic nature of the undertaking, all the old methods were found unavailing. The great height of the mountains forbade altogether the working by shafts, and to work only at the ends with ordinary means, would have required no less than thirty-six years.

One machine was invented by Mr. Mauss to drill the tunnel by means of a column of water driven by a great fall against the walls. The necessity of long hose to conduct the water and the difficulty of renewing the air, caused this to be laid aside. Mr. Colladon, of Geneva, in 1855, proposed a new project; the principal feature of which was the employment of compressed air, both as a mechanic force and as a means of ventilation. About the same time Mr. Thomas Bartlett, an engineer of the Victor Emmanuel Railroad, proposed the employment of a moveable, horizontal steam-engine, for thrusting the drills against the rocks. An air-cushion very ingeniously disposed on the passage of the piston of the steam engine served to reduce the shocks of the engine without diminishing their force. The trouble with this, however, was the difficulty of supplying the engine with air at such distance in the mountain. And at length a combination of these two methods was thought to offer a solution to the problem.

We give below an extract translated from the *Presse* of Paris for the New York *Herald*:

THE GREAT ALPINE TUNNEL.

THE PROPOSED RAILWAY TUNNEL THROUGH THE ALPS—DESCRIPTION OF THE ROUTE AND THE MACHINES TO BE USED FOR BORING THE TUNNEL.

The construction of a railroad across the Alps—the piercing of Mount Cenis—by which a communication between the valleys of Piedmont and upper Italy is to be established, and the Victor Emmanuel Railroad is without interruption to traverse the whole breadth of the Alps, greatly at this moment pre-occupies

the inhabitants of those countries and of Central Europe itself.

According to investigations which were made over twenty years ago, and are due to a learned and modest inhabitant of those countries, the late Mr. Medail, the passage offering the easiest and most direct communication between the valleys of Piedmont and upper Italy, and which at the same time would oppose the least difficulties to the execution of the work of piercing, is found between Modane, in Savoy and Bardonneche, a small town situated on the southern side of the Alps. In fact, toward these two localities the valleys of the Arc and the Doria are almost parallel, the one descending from east to west, and the other having an inclination in the opposite direction. The two points where these valleys are on a level correspond to the narrowest part of the Alpine chain.

However, the great question to be solved for the combination of the two means, was how to easily produce the quantity of compressed air necessary for serving as mechanic force. In other terms, to create a machine proper to furnish easily a considerable mass of compressed air.

Three Sardinian engineers—Messrs. Grandis, Grattone, and Sommeillier—gave the first satisfactory solution of this problem. The apparatus invented by these engineers permits to simultaneously provide for the ventilation of the tunnel, the perforation of the rock, and the clearing away of the earth and stone rubbish caused by the blowing up of the mines.

The *compresseur hydraulique* of Messrs. Grandis, Grattone, and Sommeillier consists in a kind of vast reversed syphon, which, on the one end is in communication with a fall of water, and on the other with an air box. The water descends into the first division of the syphon, remounts to the second, and compresses the air in it; this air, when it arrives to a sufficient degree of elastic force, causes a valve to open, which introduces it into the reservoir. Then an emptying valve, with which this air box is provided, opens in its turn, for throwing out the compressed air, and when the water of the second division of the syphon has been evacuated, the different movements begin anew. The movement of the valves for the admission of the water and air is regulated by a small machine set in motion by a fall of water. The air compressed in the air box is maintained at a constant pressure by means of a water column, which communicates with a water reservoir higher up. In the machine just described, with a fall of water of twenty metres, it has been possible to compress air at six atmospheres.

The air being compressed by that machine is employed as moving force for driving drills into the rock, and for producing mining holes; hereafter gunpowder blasts the parts between these holes. This compressed air besides serves as moving power in clearing away the stone and earth rubbish caused by the explosion. The *compresseur hydraulique* may also serve to produce simple excavations which circumscribe spaces of earth, afterwards destined to fall in in consequence of the ordinary means employed for this purpose; in a word, this apparatus which has compressed air as a moving agent, may be applied to all mechanical works embraced by the art of the borer and miner.

Messrs. Elie de Beaumont and Angelo Lismonda who have attentively studied the ground

between Modane and Bardonneche, signalled the presence and succession of the following rocks:—Micaceous sandstone, intermingled with micaceous slate; quartzite; anhydrous gypsum internally; dolomique limestone; lastly, chrystalized slate limestone, alternating with argillaceous limestone. Quartzine alone offers a great resistance to perforation; but the stratum which is to be traversed is not very considerable. The other rocks may be easily attacked by mine. These indications have more recently been verified by other geologists, and in particular by Mr. Mortillet.

Before definitely adopting the use of the above described machine for the works of the submarine tunnel, the Sardinian government wished to proceed to a thorough examination of those new machines. A commission composed of Piedmontese engineers and learned men was charged with submitting to an attentive study and to special trials the apparatus of Messrs. Grandis, Grattone, and Sommeillier, as also the perforating machine of Mr. Bartlett, working with compressed air instead of steam. Colonel Menebrea, who was a member of this commission, and took part in all its experiences, in the note he read before the Academy of Sciences summed up the results of this examination.

In consequence of trials executed with a fall of water of twenty metres, in order to produce the compression of air in that machine, Mr. Menebrea comes to the conclusion that at the distance of 6,500 metres (the half of the length of the submarine gallery) in a tube of ten centimetres of diameter, with a speed of five metres at the beginning of the conduit, and a pressure of six atmospheres in the air box, the force of pressure transmitted to that distance would still be of one atmosphere and one-third.

This result, deduced from experiments made with the greatest care and on a large scale, is sufficient to remove all fears which might have been conceived as to the practicability of conducting air as far as the middle of the mountain.

After having established this important fact, the commission occupied itself with studying the employment of compressed air as a motive power. First, it put to trial a perforator invented by Mr. Bartlett, in which compressed air had been substituted for steam, which originally set it in motion. The success of the substitution of air for steam was complete.

Afterwards they tried another perforator, very simple, and of small volume, invented by Mr. Sommeillier. This new machine succeeded equally well. Thus the possibility of using in this case compressed air as a motive power, is perfectly established.

A curious fact has been established in the question which occupies us. In consequence of the rapid expansion of air compressed to six atmospheres when this air was coming out of the machine the water, at nearest proximity, was frozen, although the temperature was at that moment eighteen degrees (centigrade.) Thus, by driving a considerable mass of compressed air towards the bottom of a gallery 1,600 metres deep, under ground, where, consequently, by the effect of the warmth of the earth (which, as every body knows, increases with its depth,) the temperature would rise to about fifty-nine degrees, one would obtain a considerable diminution of the temperature by the only effect of expansion of compressed air thrown out into the gallery.

Mr. Menabrea gives then interesting parti-

culars as to the acceleration of the work, which would result from the employment of compressed air for producing mining holes.

By means of air perforators, mining holes were practised in rocks of different kinds—from the softest lime-stones to the hardest sienites—and it has been established that, by using this apparatus, a mining hole was made about twelve times quicker than with the ordinarily employed machines.

In order to appreciate the importance of this result, it suffices to observe that in the general work necessary for establishing mining galleries, three quarters of the total time are employed in making only the mining holes; the last quarter is sufficient for loading the mines, effecting the explosion and clearing away the rubbish. If, therefore, with the aid of the new apparatus the time generally employed for establishing galleries is diminished in such considerable proportion, it is evident that the most important part of the problem of piercing the Alps, to say the acceleration of labor, has been solved.

But what is still more, the new perforators occupy little space; where scarcely three couples of miners are able to work, eighteen perforators may be placed. This circumstance will necessarily render the work of perforation much quicker.

In order to facilitate the moving of rubbish a very simple apparatus has been invented. It has been decided to establish at the same time near the great gallery of the tunnel, a second smaller one and only of 2m. 50 sidewise. In order to facilitate the working and to avoid the dangers a gallery of small sections would offer, the two galleries will be simultaneously formed. The principal gallery—viz., the tunnel proper, will follow that of small sections at a distance of about two hundred metres.

Mr. Menabrea thinks to be able to fix at six years the term necessary for terminating the whole of this magnificent work.

"The authors of the project," says Mr. Menabrea, "hope to have terminated in six years the submarine gallery. In fact, they estimate at three metres per day the advancement at each side of the mountain—that is to say, at six metres per day in the whole; while by the ordinary means the advancement of each gallery would not exceed 0m. 45 to 0m. 50 per day, and in the whole 0m. 90 to 1 metre."

The total length of the tunnel according to this project, would be of twelve and a half kilometres. The gallery is traced out on the same vertical plane, but it runs in two opposite inclinations towards the two outlets of the tunnel, in order to facilitate the draining of waters which may be found there.

The southern mouth of the gallery towards Bardonneche, is 1,324 metres above the level of the sea. Starting from this point the gallery rises with an average inclination of 5 000.000 upon a distance of 6,250 metres, up to the height of 1,335 meters, which is its culminating point; from there it descends to a like distance of 6,250 metres, with an average inclination of 23 000.000, to the northern mouth towards Modane, which is situated at an elevation of 1,190 metres. The summit of the mountain is over the culminating point at a vertical elevation of about 1,600 metres.

It has been calculated that in order to effect the renewal of air vitiated by respiration, lights and gunpowder employed for the mines, there would be necessary in each of the two divisions of the gallery 85,924 cubic metres of air, for twenty-four hours, at atmospheric

pressure, or 14,320 cubic metres at the pressure of six atmospheres. Now the quantity of air necessary for setting in motion the perforators is only 667 cubic metres at the pressure of six atmospheres. Thus, after having served as a motive power, the surplus of compressed air will partly contribute to the airing of the tunnel.

Near Bardonneche, above the Doria-Riparia, there are several torrents which never dry up, and the falls of which, combined with that of the Doria, are capable in their totality to compress at least 98,064 cubic metres air daily, and to reduce them at the pressure of six atmospheres. This will be for the works of the sub-Alpine tunnel the principal element of mechanical force, which nature seems expressly to have placed there.

Near Modane there is the Arc, a rapid torrent whose considerable fall will furnish a force by far exceeding that which is required for the work to be accomplished. Therefore all conditions find themselves combined for assuring the success of this great enterprise, or at least for authorising its execution.

When the great work of which we have spoken here shall have been accomplished, people will be enabled to travel from Paris to Turin in twenty-two hours, and from Paris to Milan in twenty-seven. Then there will, perhaps, still exist Pyrenees, but doubtless there will no longer be Alps.

THE ATLANTIC TELEGRAPH.

A week ago to-day the public was startled by the announcement that the Telegraphic Cable had been successfully laid between Newfoundland and Ireland. At first the intelligence seemed too glorious for belief, and many a surmise was made as to the probability of its truth; but all doubt has now been dispelled, and one of the great problems of the age has received its solution. The benefits to be derived to the world from this enterprise are not yet calculable. Its first and, perhaps, its most important effect will be the equalization of trade between our own country and Europe. We shall see no more of the building up of fortunes by the arrival of the European steamer; the brilliancy of such speculations will be lost, but, at the same time, the sudden crumbling of gigantic fortunes, and the crash of unexpected bankruptcies by *adverse news* by "The last Steamer," will also be done away with. The ocean of trade will ebb and flow, as the waters of the broad sea, rather than as the Bay of Fundy. A more healthful spirit will be diffused through the mercantile world, and its business based upon a safer foundation. The profits of a season may not be as great, but the aggregate result will be more satisfactory.

The *Telegraphic Cable* is also a surer guarantee of peace between the Old World and the New. The slender wire traversing two thousand miles of water, will form a stronger bond, than parchment treaties, though signed with all the forms of a perfected diplomacy, and will exercise greater influence than a bill for the *increase of the army or navy*.

The next great work of the age, and one

demanding no less by the wants of the world than by our own country, is the building of a railroad through our territory to the Pacific coast; the railroad will be accompanied by the Telegraph, and the habitable world will be nearly surrounded by the magic wire. The success of the Atlantic Cable also gives us greater hopes of the building of the Pacific Railroad. It is true that the railroad is a work of greater magnitude than the Telegraph, but the difficulties to be encountered are less, and such that man can more easily grapple with them. The same earnestness of purpose, the same honesty of administration is required in one case as in the other, and success can not then be problematical. As an enterprise demanded for the good of our country and the benefit of the world, few will doubt its importance; as an investment, if the administration is properly conducted, few will doubt its profitableness. True, clouds have arisen and darkened its prospects, but the dawn of a better day is approaching, and when once the Railroad shall have opened up the *interior of the Great West*, a new impetus will be given to the commerce of the world.

The following list of all the submarine cable, now laid, we take from the Cincinnati *Price Current*:

Cables.	Miles.	Wires.	Date.
Dover and Calais.....	24	4	1851
Dover and Ostend.....	75	6	1852
Holyhead and Howth.....	65	1	1852
England and Holland.....	115	3	1853
Port Patrick and Donaghadee.....	13	6	1853
Second Cable do.....	13	6	1853
Italy and Corsica.....	65	6	1853
Corsica and Sardinia.....	10	6	1854
Denmark across the Great Belt.....	15	3	1854
Denmark across the Little Belt.....	12	3	1855
Across the Firth of Forth, Scotland	4	4	1855
Verna and Balaklava, across the Black Sea.....	340	1	1855
Balaklava and Eupatoria.....	60	1	1855
Across the Danube at Shumla.....	1	1	1857
Across the Houghy river.....	2½	5	1
Messina to Reggio.....	5	1	1856
Across the Gulf of St. Lawrence.....	74	1	1856
Across the Straits of New Foundland, Prince Edward Island.....	10½	1	1856
Across the Bosphorus, at Kandilli.	1	1	1856
Across the Gut of Canso, Nova Scotia.....		3	1856
Six cables across the mouth of the Danube, at the Isle of Serpents, each one mile long and having one conductor.....	6	6	1857
From Petersburg to Constrand.....	10	1	1856
Across the St. Lawrence to Quebec.....		1	1855
Across the Soland, Isle of Wight, England.....	3	4	1856
Across the Atlantic, from Ireland to Newfoundland.....	1959	1	1858

RAILROAD DECISION.—The Maryland Court of Appeals, in the case of the Baltimore and Ohio Railroad Company, vs. Wm. Lamborn, has decided that the railroad companies in that State are *not responsible* for injuries done to cattle and stock by their cars, in any case in which cattle, etc., are on the railway track through *any negligence or fault* on the part of the owners of them; that the owner of cattle is bound to keep them in an enclosure or in custody at his peril; for every entry of them on another's possessions is a trespass, and this law applies as well to the intrusion of cattle and horses upon the land over which a railroad company is entitled to its franchise as to the property of a private owner.—*Cin. Gazette*.

Correspondence of Railroad Record.
LETTER FROM ARIZONA.HACIENDA DE SANTA RITA,
Tuesday, June 22d, 1853.

W. WRIGHTSON, SECRETARY &c. We reached Tubac on Thursday, 17th inst., having been on the way 41 days, traveling through some of the fairest portions of Texas and New Mexico, and over some desert plains, experiencing just enough of hardships and danger to render the trip interesting.

On reaching Tubac we presented our letters to Col Poston, and were cordially welcomed by him, and introduced to several of the principal members of the Sonora Company.

Having enjoyed the luxury of a bath in the Santa Cruz, we were invited to supper, and for the first time in many days, had the privilege of eating with, and like civilized men, in the presence of intelligent and refined women, whose relatives are connected with the Sonora mining operations. Col. Poston, who is widely known and highly respected throughout this whole region, has evidently made it a point to secure and draw around him associates of the better class *only*,—men of activity, energy, and integrity, and so far as I can judge he has been eminently successful. He has had the town site of Tubac surveyed and has taken possession of it for the company which he represents, and under his auspices the town is rapidly improving which otherwise would have gone to ruin. Twice destroyed by the Indians and abandoned by its inhabitants, it now rises Phoenix like from its ashes, and in time is destined to become the great center of this region of immense mineral wealth.

Of the richness of the ore in the Heintzelman mine belonging to the Sonora Co., of which Col. Poston is agent, it is unnecessary for me to speak, as it must be by this time have a world-wide reputation. The yield of the ore now being mined averages two thousand dollars per ton, and I do not doubt that our (Santa Rita) mines will furnish as rich a yield—when we have sufficient force to develop all their fullness—and this may be done with fewer disadvantages and far less labor. Col. P. and his party have overcome the most obstinate circumstances and are now in the way to gather in a rich harvest—and so may we.

The following day (18th) was occupied in securing animals, supplies and help, sufficient for immediate operations at our mines.

All possible arrangements having been completed, on the morning of the 19th we left Tubac at 8 o'clock, and at 11 o'clock, having ridden about twelve miles, we halted, and Col. P. (who had kindly volunteered to accompany us,) pointed out the old Hacienda of the Santa Rita mines, (which were destroyed some 35 years since by the Apaches who also massacred every soul belonging to the mines, not one escaping). Here were discovered the remains of old furnaces and other evidences of mining operations.

Specimens of slag, still containing silver,—found in the debris of the furnaces, show that the former occupants must have treated the ore in the rudest manner and with the most simple means.

A short distance (perhaps three hundred yards) from this point and nearer the mines, we formed our camp and named it Hacienda de Santa Rita.

While dinner was being prepared we improved the opportunity of examining the surroundings of our camp. If you could but have the privilege of joining us now you would, we are sure, say our situation is delightful.

In the rear of our camp (itself shaded by oak and walnut trees) rises a rocky bluff covered with live oak, walnut, ash, grape-vines and varieties of the cactus in full and varied bloom. In front is a grassy lawn, gently sloping down to the bank of the stream, (bordered with *flowering willow* and other foliage) then rising as gradually upon the other side to a semi-circular ridge, beyond which rises the magnificent and cloud capped peaks of Santa Rita. Eastwardly, and full in view (just over a fine grove of mesquit trees which spot the fine pastures clothed in grassy verdure and floral beauty) are the three principle mines belonging to our Company, viz: The *Salero*, *Asugarero* and *Bustillo* (of which more anon). These are within a mile and a half of the Hacienda and easy of access. The opening of the Ojero is not quite in sight from this point, but on the enclosed sketch you will find its position marked. Afternoon we set out for an inspection of the mines already opened.

Our first visit was to the *Salero* which we descended through a large opening—some 60 feet or more without difficulty. The vein is divided at the surface but unites about one-third of the way down, forming a lead or lead of 3 feet average width. It has been cleaned out some 60

feet, and at this time, the last of the dry season, is apparently free from water. If means were on the ground for clearing out the shaft to its full depth before the rainy season, much labor would be saved, and the value of its ore made manifest.

It will be our first care to secure it so far as possible with the few implements we may have, from the drippings of the mountain side. In regard to this mine, the indications warrant the conclusion that the Spaniards reaped from this a richer reward, than from any other known mine in the region. Were it otherwise, that indolent race would scarcely have sunk so wide a shaft and attained so great a depth with their limited facilities.

From the opening of the *Salero*, we have a splendid view of the Santa Rita Valley—spread out like an immense calico counterpane of richly tinted pattern, and dotted in here and there with small knots of mesquit and other trees, furnishing one of the finest grazing fields in the world.

Cattle and sheep fatten on the rich gramma grass so abundant here, with no expense save the cost of herders—the grazing being good the year round.

It will certainly be the policy and interest of our Company to have these fine pastures filled with lowing herds and flocks of sheep and goats at the earliest possible opportunity, as quite a revenue might be derived therefrom.

Surrounding this lovely vale, are "sunny slopes, rugged cliffs, and towering peaks," most prominent among the latter are the two principal peaks of Santa Rita on the North. Easterly an unbroken chain stretches away toward the Chiricahui. The mountains of Santa Cruz in Sonora, break the southern horizon, while looming up in the far west is the towering form of the Picacho de Babaquivera whose lofty crest catches the earliest gleam of morning, and is crowned with the last fading glories of evening.

The *Asugarero* was opened by the Sonora Company. Its entrance is horizontal in direction, and from the cursory examination given it, can only say it looks well.

We next visited the *Ojero*, a mine of great reputation among the Mexicans, with a lode of greater width than either of the others, but abandoned on account of the yielding of one of the sides, which to the former proprietors was an insurmountable obstacle. With proper appliances, it can be made perfectly safe, and will be easily worked. Its approach, however, is quite difficult. The vein is wide, bold and formal, the ore easily obtained and apparently very rich.

Descending from this mine we noticed a vein-stone cropping out, which will be the subject for future examination.

The *Bustillo* lies to the west of the above mentioned mines, lower down, easy of access, and may be reached by a wagon-road from the Hacienda. It was opened more recently than either of the others, and has been mined only 25 or 30 feet.

There is now several feet of water at the bottom. We quenched our thirst with refreshing draughts therefrom, and night approaching, we were prevented from visiting the other mines in our jurisdiction, but we have already seen enough to convince us that abundant resources exist here for the formation of a large mining establishment.

It will require about 150 hands to populate the mines visited, and a working force of 50 men, will be constantly demanded, in the different occupations, incident to the reduction of the ores at the Hacienda, requiring a full force of 200 to 250 hands.

The ores being entirely of argentiferous galena, can be treated simply by fire.

We shall at once prepare houses for the reception of the main company with their stores, against their arrival.

We are now sheltered under a large tent which we purchased at Fort Buchanan on Saturday last, together with such implements as were immediately required for building purposes. The Fort is distant 17 miles east of our Hacienda.

The near approach of the rainy season, admonishes us that no time must be lost. We have already selected our timber, dug out and walled an excellent spring (a better one does not exist between here and the Rio Grande) and are making the most of our time generally. Our nearest neighbors are at Tubac, thirteen miles west. Our Hacienda will be the stopping place between that point and Fort Buchanan on the east.

The pineries of the Santa Rita mountains are in sight of our location, and can be made accessible therefrom. They furnish the finest of lumber, which is now selling at Tucson at (\$250.00,) two hundred and fifty dollars per 1000 feet, (I am almost afraid to make such a statement, but it is

a fact,) a portable saw mill erected there would prove a source of great profit when emigration shall have peopled the country around.

Our position is over 5000 feet above sea level. We enjoy pure, bracing, invigorating atmosphere, far more delightful and healthy than we have hitherto known.

We sleep comfortably under a blanket in the open air, and arise with the sun, free from cold, aches or pain, and partake of our food with excellent appetites. Labor does not seem so fatiguing here even in the sun, as in the close atmosphere of your city. Our sunsets are inexpressibly beautiful and our scenery sublime.

I shall endeavor to furnish you from time to time, with statistics that you may judge if the reality is overrated.

In conclusion let me add in the words of another—a rich and virgin field is before us and no time should be lost in fully occupying it. The laborers are yet too few. The time is near at hand, when large fortunes will be required to obtain ownership and possession of mines like these.

We have been placed in full, free, and peaceable possession as agent of your company, until the arrival of the Secretary and main party, and shall do our best in preparing for their reception. Truly, yours,

H. C. GROSVENOR.

[From the Frankfort Commonwealth.]

TO THE BONDHOLDERS OF THE KENTUCKY
CENTRAL RAILROAD COMPANY.

The Directors of the Kentucky Central Railroad Company have recently issued a circular, modestly inviting the holders of their Mortgage Bonds to dispense with the payment of the interest coupons for the next four or five years, with a view to enable them to relieve the company from its present embarrassments and thoroughly complete and equip the road. The sum of eight hundred thousand dollars *only*, the circular informs us, is required for these purposes. As the money is to be expended under the direction of (substantially) the same persons who have heretofore managed the affairs of the company, a brief review of its history will enable the Bondholders to form some opinion as to the reliability of their estimates, and the propriety of entrusting further sums to their control.

In the annual report of the Directors, dated December 1850, the cost of the road from Covington to Cynthiana, per mile, was estimated at..... \$18,000
In an article published by an officer of the company in the Railroad Journal, of May 10th, 1851, the cost, per mile, of the whole road was stated at..... 17,000
In December 1851, the estimated cost, per mile, in the printed report was..... 21,320
In a circular to the Bondholders, dated December 1852, it was stated per mile, at..... 25,000
In the report to the stockholders, published in the same month, it rose, per mile, to..... 39,800

The actual expenditures for construction and equipment are stated in the report of December 1857, at \$4,091,603. Of this sum \$146,377 was expended in grading the road from Paris to Lexington, leaving \$3,945,226 as the cost of the road between Covington and Paris, the distance being 80 miles, and the cost, per mile, \$49,315.

The real discrepancy between the estimates and the actual expenditure is, however, still greater than those figures would indicate, for the highest estimate, that of December 1852, expressly provides for an expenditure of \$100,000 for depots, wood sheds, &c., which the circular informs us have not yet been built; and also for the completion of the Paris and Lexington division, which will require at least \$200,000 more. If to the \$49,315 per mile be added the further sum of \$10,000 per mile, now asked, the road will then have cost a fraction less than \$60,000 per mile.

The Baltimore and Ohio—one of the most expensive and difficult roads in the country to build—with its enormous equipment, extensive tunnels, and repeated re-building, with splendid station-houses and extensive double

tracks, has cost only \$64,000 per mile. A neighboring road from Louisville to Lexington, quite as difficult and costly to build, has cost only a fraction over \$23,000 per mile. What reason can be assigned why the Kentucky Central should cost near three times as much per mile as the line from Lexington to Louisville?

Errors so enormous as those shown above, are by no means calculated to induce confidence in the management of the Board of Directors, Superintendent, Engineer, &c. Indeed, the simple fact that the road, in its present unfinished condition, (without "a structure upon it that can be called a depot," with insufficient Rolling Stock, without water or wood sheds, &c., with bridges rotting down and iron rails rapidly becoming worthless,) should have cost far more than any railroad ever built west of the Alleghany mountains, is of itself sufficient to charge the Directors, &c., as wholly incompetent, if it does not even justify the use of a harsher word.

Is it to be expected that the same managers, with no further interest in the prosperity of the road than to hold office and power, will prudently expend the means now demanded of you? Should not the real and only parties in interest,—the *Bondholders*—take possession of their property, and see to it, that its *earnings* are not squandered in useless and wasteful extravagance?

The coolness of the circular before us, is positively refreshing. We propose, say the Board, "to put you," the Bondholders, "to little or no inconvenience, for all that is asked is to loan a few coupons to be funded," (the amount is subsequently stated as only a fraction over six hundred and sixty thousand dollars,) and they straightway proceed, after the old fashion, to demonstrate by an estimate, the feasibility of their plan for rescuing the company from its embarrassments.

For this purpose, they suppose the road to net \$250,000 per annum which they say is a low estimate. Now, the profits of the road for the year, ending December 1857, were only \$205,000. The Board therefore estimate an increased profit of \$45,000 per year—to earn which, will require at least \$100,000 of additional business. The last year was one of unexampled prosperity and activity in business, and as no extension of the road is contemplated and no additional connections are to be formed, some facts will be required before the public can be induced to believe that so large an increase of transportation will be yielded in the season of depression that has followed.

But the Board are of opinion that the annual profit of \$250,000 will enable them to complete and equip the road, leaving them at the end of five years with a surplus of \$257,000 for the purpose of the sinking fund, "which sum, if judiciously managed, with the increased earnings over and above the estimates, will absorb the funded coupon debts."

How it is that \$257,000 is to absorb \$660,000 of funded coupons, and pay \$260,000 of first Mortgage Bonds, maturing in 1862, is not explained; but it is certainly evident that the management, to effect such an object, must be of an extremely judicious character.

If, however, the net receipts, instead of realising \$250,000, should amount to only \$225,000—to earn which, supposes an increase of gross receipts over the year ending last December of \$50,000 per year—there will be, at the end of five years, a surplus of only \$157,000.

The funded coupons then due will amount to...\$660,000
First Mortgage Bonds maturing in 1862, one year previous thereto..... 260,000

Making..... 920,000
Deduct surplus on hand..... 157,000

Leaving a deficit of.....\$763,000

The circular wholly ignores the *Income Bonds* and floating debt except when they are passingly alluded to as "embarrassing and harrassing the company." Do the bondholders suppose that those creditors will stand idly by, with folded hands, during another half dozen years that this experiment is being tried? Any one of them obtaining judgment, and a return of "no property," to his execution against the company, may, by petition in equity, compel a foreclosure of the mortgages, unless he is bought off by paying his debt, in which case, hundreds of others will follow in his footsteps. What then is the use of going into an arrangement that can be productive of no good, and which is wholly at the mercy of others whom we can not control.

The plain truth is, the road has been shown to be miserably mismanaged; has cost a great deal too much, and is not worth, and will not sell for the present debt of the company. It has not paid, and, with the present management, never can pay, the interest on the debt, whilst a large amount of the principal is maturing.—We are now invited to increase the debt some \$600,000 to 800,000 dollars more, and thereby add an additional forty to fifty thousand dollars per annum to its interest account, leaving every thing in the hands of the very men who have produced the present condition of things.

For some years past efforts have been made to excite the public sympathy, because of the individual liabilities of the Directors, incurred on the company's account. To all such appeals the answer is simple and obvious. The means of the company in their hands were amply sufficient, if economically administered, to have completed the whole road without any resort to their individual credit.

The Capital Stock and Mortgage Bonds, together with the bonds loaned by the citizens of Covington and Cincinnati, amounted, in the aggregate, to three million seven hundred thousand dollars—being two million three hundred thousand more than was necessary to enable the Directors of the Lexington and Louisville roads to build ninety four miles of road, and one million six hundred thousand more than the latter line has cost. Besides, it is five hundred thousand more than their detailed estimate of December 1852 required, in which one hundred thousand dollars was estimated for depots, wood sheds, water stations, and provision made for the completion of the Paris and Lexington Division, neither of which has been done. That they incurred liabilities on the company's behalf, when they have wasted these immense sums, might be offered in extenuation of their fault, but no further.

ONE OF THE BONDHOLDERS.

SPARTANBURG AND UNION ROAD.—The annual meeting of the Spartanburg and Union Railroad Company, will be held at Union on the 25th of August next. The Company has received a fine new passenger car, and can now accommodate the traveling public in a comfortable manner. Two new passenger cars are being constructed in this city, and will be ready for the track in a few days. The road is now in operation twenty-five miles—five miles beyond the crossing of Broad River, where the cars

connect with a daily line of stages to Unionville and Spartanburg. The iron materials are all on hand to lay the track to Unionville, and we are informed the work will be pressed forward without delay.—*Carolinian*.

THE FRUIT OF THE VINE:

ITS USES AS A MEDICINE AND DANGERS AS A BEVERAGE.

BY DAVID CHRISTY.

Remarks on Animal Physiology.—Vegetable proximate principles.—Elements of respiration and nutrition.—Animal heat.—Effects of Starvation.—Wine as a medicine.—Alcohol—Its importance in Sickness—Its disuse impracticable.—Wine as a beverage.—Tendency of Alcohol to disturb healthy action—A contrast—Wine and Beer less dangerous.—Have less Alcohol—Proportion of Alcohol in Wine—Temperance in Wine countries—Its cause—Oxygen—Its metamorphosis of the tissues—This promotive of health—Alcohol checks it—This injures health—The important point in this question—Closing Remarks.

The primary conditions of the maintenance of *animal life*, are a constant supply of *articles of food* and of *oxygen* in the shape of *atmospheric air*. As soon as an animal is released from its dependence upon the parent for sustenance, and begins to receive food into its stomach, the process of *digestion* and the formation of *chyme* and *chyle* begins, and the independent production of *blood* is commenced. As long as an animal lives, its blood is in a state of constant motion and of constant change; giving off its elements of nutrition as it courses through the system, wherever they are demanded to form, to complete, or to sustain, the various tissues of the body. The process has been thus described: "Light red blood streams out from the heart, through the arteries, into all parts of the body, from which it returns, darker colored, through the veins, back again to the heart. But before the latter blood recommences its circulation, it is impelled through the lungs, in which it comes in immediate contact with the inhaled air, and by means of which it experiences a most remarkable change. When in contact with the air, the dark venous blood is converted again into light red arterial blood, and thereby the air loses a part of its free oxygen, and receives in return carbonic acid and vapor; the exhaled air is accordingly poor in oxygen, but rich in carbonic acid and vapor."*

From the known properties of vegetable products, it is evident that the food of animals include two distinct series of *proximate principles*: those which are destitute of *nitrogen*, and those which include that element. The first class is composed of carbon, hydrogen, and oxygen, and is principally concerned in maintaining animal temperature, by a species of *slow combustion*—that is *digestion*—terminating in the production of *carbonic acid* and *water*, which are thrown off by the skin and lungs; these substances, therefore, have been termed *elements of respiration*. The second class consists chiefly of carbon, hydrogen, oxygen, and nitrogen, together with sulphur and phosphorus, and is employed for the formation of the principal organs of the body: these substances have been called *plastic elements of nutrition*. The elements of *respiration* include starch, gum, sugar, woody fiber, fat, alcohol, beer, and wine; the elements of *nutrition* are the products of vegetables containing *nitrogen* and the flesh and blood of animals. The substances which enter the stomachs of animals as food, are subjected to the process of *digestion*, and converted into *chyme*. The *chyme* passes from

* Stockhardt.

the stomach into the small intestines, where it soon changes its appearance, by becoming blended with *bile*, and is ultimately separated into two portions, one of which is white as milk, and is termed *chyle*: the other portion, passing on, is finally ejected as *excrement*. This *chyle*, on being absorbed, carries with it, into the blood, all of the elements both of *respiration* and *nutrition*, which, by digestion, are separated from the food; and thus, not only is the animal heat maintained, but the solid parts of the body are continually replenished from the elements of nutrition, which are borne along by the blood in the course of its circulation. The disappearance of the food, taken into the stomach, occurs exactly in the same way as that of the wood with which we heat our apartments. It is changed into æiform combinations; that is, into carbonic acid and vapor, which are partly exhaled by the lungs, and partly evaporated from the skin.* By this process *heat becomes free* in the animal body as a result of *digestion*, just as it becomes free in the stove as a result of *combustion*. By the union of carbon with oxygen, in whatever part of the system this is effected, *heat must be evolved*, on the well established principle that the formation of carbonic acid is always attended with the evolution of heat.† We can now understand the origin of animal heat, and why it is that a healthy condition of the digestive organs is essential to its preservation in a proper degree.

This subject demands some further investigation, to enable us to comprehend the effects of alcohol upon the human body.‡ In the natural and healthy condition of the system, the food supplies the necessary carbon for the support of animal heat; but when food is withheld, the *fat* of the body is consumed, its carbon being converted into carbonic acid, and its hydrogen into water. Hence results the emaciation attending long *abstinence* or *starvation*. The fat of animals, therefore, may be compared to the storehouses of fuel which are laid up for winter, when an increased amount of heat is needed, and daily supplies of firewood can not be obtained. In the process of *starvation*, however, it is not only the fat which disappears, but also, by degrees, all such of the solids as are capable of being dissolved by the oxygen. For, in the absence of the elements of respiration, which, like those of nutrition, are also supplied by the food, the oxygen, after consuming the fat in the system, combines with other solid parts of the body, and consumes them also. Toward the end the particles of the brain begin to undergo the process of oxydation, and delirium, mania, and death close the scene.||

From the foregoing it appears, that if the supply of food be cut off from a healthy man, or if disease destroys his digestion, no additional blood can be formed, and his life must pay the forfeit. Let us look at a few of the facts. The whole weight of the blood in a healthy man is estimated at 24 pounds, of which 80 per cent. is water. From the known composition of the blood, it would only require 64,102½ grains of oxygen to convert the carbon and hydrogen of these 24 pounds into carbonic acid and water and remove them from the system. An adult man absorbs into his system 32½ ounces, or 15,661 grains

of oxygen daily; it would, therefore, require only four days and five hours for the decomposition of the 24 pounds of blood, and for the speedy death of the man, unless new blood were produced by the supply of food, or some element of *respiration* taken into the stomach to relieve the solid parts of the body from the action of oxygen, and prevent their entire decomposition.

We may now proceed to consider the uses of wine as a medicine; and, in the discussion, reference will only be made to the sick or the invalid. Men in health, if wise, do not take medicine. In cases of sickness, where the digestion is impaired or destroyed, the elements of *respiration* can not be supplied to the blood, in the ordinary mode, as the digestive organs are powerless. They must reach that fountain of life by some means independent of digestion. And here it is that the physician finds *alcohol* his last and best resort. Its composition is carbon 52.17, hydrogen 13.31, oxygen 34.52 = 100 parts. It has no *nitrogen*, and is purely an element of *respiration*; and not only so, but it acts independent of the powers of digestion, and enters the circulation by *absorption*. In this consists its great excellence. Being *indigestible*, it has not to await the tardy action of the stomach, but reaches the blood, as it were, by a single thrill, reviving the drooping energies of the patient almost as speedily as the electric shock traverses the system. The alcohol being introduced into the circulation, it affords the oxygen the means of combination, and prevents its action upon the solids of the body. It thus retards the wasting of the tissues, keeps up the animal heat, and affords time for the processes of nature and the action of medicine to overcome disease; whereas, if the system be left unprotected from the action of oxygen, the *metamorphosis of the tissues* proceeds with rapidity, and the patient is soon reduced so as to be beyond the power of the physician to save. These are the uses of wines, or any kind of pure spirits, as medicines. If, however, impure brandies and wines are administered, in extreme debility, they must have a pernicious effect, like improper medicines, and may turn the scale deathwards; when, if pure articles are used, the opposite results may be attained.

From what has been said in relation to the action of alcohol as a *Medicine*, it may be easily divined that it must exert a powerful influence upon the human constitution when used as a *Beverage*. This point should be considered with care; and, in its discussion, it must be noted, that our remarks are to be applied only to persons in good health, and not to the sick or the invalid.

In all our common articles of food, the elements of *nutrition* and *respiration*, as already intimated, are so nicely balanced in their proportions, that, for the diet of a healthy man, there is no necessity for adding an extra quantity either to the one class or the other; or, in other words, the supply of *nutrition* and of *animal heat* is so admirably equalized, in the composition of common food, that any material derangement of the proportions which it affords, is attended with a corresponding derangement of the vital functions. It is obvious, therefore, that if we add a portion of alcohol to the food taken into the stomach, the elements of *respiration* are increased and the animal heat augmented in a proportionate degree. No part of the alcohol can go to form the tissues of the body, or to renovate and sustain them, as it is destitute of nitro-

gen, and not an element of nutrition. It can only serve as an element of respiration, to be burned in the lungs of the man, and to add to the amount of his animal heat. The result is, that as the quantity of alcohol is increased from habit, an unnatural exhilaration is produced, leading to an overtasking of the muscular and nervous system, and to premature decay in the manhood of the victim. To use a familiar phrase, he has "lived too fast."

Let us gain a clearer view of this point by contrast. We know that an insufficient supply of food, tends to produce paleness of the cheek, because both the animal heat and the nutrition are less than is demanded to keep up the healthful condition of the system. On the other hand, where age has not indurated the skin, an abundance of food keeps up the vital powers, and the face, possessing the ruddy color of health, bears testimony to a well-stored stomach. But when alcohol is added, in such a case, in excess, the nice balance between nutrition and respiration is destroyed, the healthful action of the animal functions is impaired, the ruddy glow of health disappears from the cheek, the deep red of the furnace heated by flame overcasts the countenance, and the habits of the inebriate stand revealed. Now, if pure alcohol will do all this upon a healthy constitution—and none dare gainsay its truth—how much more fatal and how much more speedy, must be the production of the crisis in the drinker's career, where deleterious compounds are used in its stead?

But while alcohol is exclusively an element of respiration, and all its modifications of brandy, rum, gin, and whisky, possess only this property, beer and wine, not being the product of *distillation*, retain a portion of the elements of nutrition, belonging to the substances of which they are manufactured, and have been considered as less pernicious, on this account, than *distilled* spirits. There is some truth in this view; but the less injurious effects of beer and wine are not attributable, we think, so much to the nutrition they include, as to the limited degree of concentration in the alcohol they contain. BARON LIEBIG asserts, that a person who drinks eight or ten quarts daily, of the best Bavarian beer, obtains from it, in a whole year, exactly the quantity of nutrition which is contained in a five pound loaf of bread or three pounds of flesh. Wines will not exceed beer in their nutritive constituents, and can not, therefore, be considered as having more than a mere shade of nutritive qualities. The mildness of their action upon the system must be due, then, to the small per cent. of alcohol which they contain, as compared with distilled spirits, and to the modifying influences, perhaps, which are exerted by their nutritive properties.

Let us see how much alcohol is consumed by wine drinkers, and then we can form a better judgment as to the effects of wine as a beverage. The cheaper kinds of pure wines, used by the common people of Europe, have no more than seven or eight per cent. of *alcohol*, while some of the more costly varieties contain nearly double that amount. In using the eight per cent. wine, at the rate of a half pint per day, a man takes into his system, in one hundred days, exactly two quarts of alcohol, and in a year seven and three-tenth quarts. This is barely a gill of alcohol in six and a quarter days, or a pint in twenty-five days. Allow double this amount, or a pint of wine a day, and the man who drinks it consumes but a gill of alcohol in three and one-

* Stockhardt.

† Pereira.

‡ The term *alcohol* is used to represent all the common liquors in use which embrace alcohol.

|| Liebig.

§ Liebig—French weight.

¶ Lavoisier—French weight.

eight days, or a pint in twelve and a half days.

It will now be readily understood why less intemperance prevails in wine-producing countries, than in those where distilled spirits are largely manufactured. The pure wines have not sufficient alcohol, in the quantity which men generally can afford to drink, to produce any very injurious effects. This result, however, may not be due so much to the small amount of alcohol which the wine contains, as to another very obvious cause. *Starch* is the principal element of *respiration* in the food of men well to live; but the coarse bread of the peasantry is deficient in starch, and the wine used at their meals may only make up the deficiency in the elements of respiration, and, consequently, no bad effects result from its use. But among the higher classes, where the food is richer in starch, and the stronger wines are used, and in greater quantities, the alcohol consumed must make more impression upon the constitution, and intemperance prevails chiefly in these circles.

To understand more fully the effects of *Wine as a Beverage*, reference must again be had to the agency of oxygen in decomposing the solids of the body. It has been explained how this occurs in sickness or starvation. In such cases the waste of the fleshy parts of the body is disastrous, because they can not be renewed, on account of the absence of the elements of nutrition in the blood. But the oxygen is no less effective in its action upon persons in health, though the results are not so obvious as in sickness, for the reason that the parts removed are constantly reproduced from the daily use of food. This wasting process, as already stated, is called the *metamorphosis of the tissues*, and is essential to the maintenance of a sound condition of the bodies of healthy men. By it the tissues are metamorphosed into carbonic acid and water, which, passing off by the skin and lungs, makes way for the constant renewal of the tissues by the elements of nutrition supplied by the blood. It is by this means that a perpetual waste and reproduction of all parts of the body is carried on, and that man's strength is renewed, day by day, as long as the equilibrium is kept up between the elements of *respiration* and *nutrition*. But when alcohol is taken into the stomach, in excess, it is diffused throughout the system, along with the blood, and the oxygen has to dispose of it by converting it into carbonic acid and water. The metamorphosis of the tissues is thus interfered with, by the presence of the alcohol, and it ceases to proceed in a healthy manner. The effects of the alcohol upon the system, of course, must be proportioned to the quantity used. A small amount taken daily, by a healthy person, may not seem, at once, to produce any very decided results; yet the natural tendency, even of small quantities, such as is contained in wine, is to disturb the healthy action of the system, produce a morbid derangement of appetite, increase the desire for indulgence, augment the quantity consumed, impair the intellectual faculties, and demoralize the man. These are the dangers of the use of wines, or any other liquors, when drank as beverages by persons in health.

And here, now, we can make a point to which special attention is invited. Alcohol, whatever quantities or forms it may be used, acts as the *antagonist* of the operations of nature. This is the law of its action upon living beings. No one who studies the whole

question closely, will venture to pronounce this a random assertion. Take the case of the man when *diseased*, in the special manner demanding alcohol; the operations of nature are then perverted, the laws of health are impaired, and the tendencies toward the dissolution of the body are accelerated: alcohol arrests the action of these perverted laws of the system, and affords time to the physician, or to nature, to recover the lost ground, and restore the healthy functions of the constitution. Take the man when in *perfect health*, and the unperverted operations of nature tend to perpetuate the vigorous condition of the body; alcohol disturbs the equilibrium between respiration and nutrition, retards the metamorphosis of the tissues, induces morbid action in the system, produces torpidity of the liver, the bloating of the countenance and a hundred other ills, which tell, with unerring certainty, that the health of the system has been overthrown.

A remark or two, and we have done. The phrase—the use of wine in excess—has been employed. Wine, or other alcoholic drinks, can only be used consistently with the laws of health, when it is necessary to guard against the effects of a partial or total cessation of digestion, or in the deprivation of sufficient nutritious food. Any thing beyond this is unnecessary and must be considered as in excess. Healthy men, who can afford an abundance of nutritious food, have no need of wine or other beverages containing alcohol, and must suffer injury from their use; because they receive into the system an excess of the elements of respiration, which, if prolonged, must impair health.

Intemperance is more prevalent, and its effects exhibited more prominently in the United States than in the wine countries of Europe; for the reason that, with us, nutritious food is more abundant than with them, and all our beverages, the native wines excepted, contain a much greater proportion of alcohol than is embraced in their wines.

It does not appear to be the plan of Divine Providence to bestow his blessings upon men, otherwise than that they may be abused to the injury of the recipients. God does not choose to extirpate moral evil from the earth, but leaves men free to resist the influences of vice or to yield to its allurements. Many of the things that are essential to personal enjoyment or social welfare, when lawfully used, become the occasions of the greatest evils, personally and socially, when perverted from their original design. Herein it is that men are left in the enjoyment of their free agency, while, at the same time, they are held morally accountable for their acts. In perfect consistency with these principles, Paul could exhort Timothy to drink no longer water, but to use a little wine for his stomach's sake and his often infirmities; while, but a short time previous, he had declared to the Corinthians, that no drunkard shall inherit the kingdom of God.

ILLINOIS CENTRAL.—The earnings of the Illinois Central Railroad for July were as follows:

From passengers.....	\$56,744 61
From freight.....	75,052 01
From miscellaneous.....	24,233 06
Total, July, 1858.....	\$147,029 62
Total, July, 1859.....	189,099 18
Decrease, July, 1858.....	\$42,069 50

Mr. James M. Smith, the efficient Superintendent of the Indiana Central Railroad, is shortly to resign his office and take a position on the Illinois Central Railroad.

The following notice has been issued by the Michigan Southern Railroad:

The Michigan Southern and Northern Indiana Railroad Company having declined to accede to the request of the Cleveland Convention of July 21, 1858, to cut off the New York and Erie R. R. from all connection with the West, the New York Central Railroad gives notice that they will charge the Michigan Southern Railroad Company local tariff rates on all freight forwarded by them to the Michigan Southern Railroad.

Arrangements have been nearly made by which goods will be forwarded, via either all railroad or steam on lake, with unrivaled dispatch, and at rates as low as via any other route.

For freight contracts, bills of lading, and tickets, please call at the office of the Michigan Southern Railroad Company, No. 193 Broadway, cor. of Day street, New York.

John F. Porter, Agent.

The following gives the receipts and expenditures of the United States for the quarter ending the 30th of June 1858, exclusive of trust land and treasury notes funded:

RECEIPTS.	
From Customs.....	\$9,850,267 21
From sales of public lands.....	474,546 07
From incidental and miscellaneous sources.....	207,741 16
From Treasury Notes issued per act 23d Dec. 1857.....	12,628,700 00
Total.....	\$23,161,256 44
EXPENDITURES.	
Civil foreign intercourse and miscellaneous.....	\$6,669,755 16
Interior (Pensions and Indians).....	739,324 17
War.....	8,488,221 53
Redemption of bodily land stock.....	\$100 00
Payment to creditors of Texas, per act of 9th Sept., 1850.....	131 25
Interest on public debt, including Treasury Notes.....	751,303 94
Payment of Treasury Notes issued per act of 23d Dec., 1857.....	3,235,700 00
Total.....	\$23,730,570 52

AN ACT IN RELATION TO SLEEPING CARS.

PASSED APRIL 7, 1858.

The People of the State of New York, represented in Senate and Assembly, do enact as follows:

SECTION 1. Any patentee of a sleeping car, or his legal representative, may place his car upon any Railroad of this State, with the assent of the company owning such road. Such patentee, or his legal representative, may charge for the use of said car, in all cases, to each passenger occupying the same, forty cents, which sum shall entitle such passenger to the use of a berth for one hundred miles; and the said patentee, or his legal representative, may charge at and after the rate of three miles for every additional mile; but in no case shall the charge exceed eighty cents.

SEC. 2. The Railroad Companies permitting the use of such cars shall, nevertheless, keep sufficient first class cars of other kinds, for the convenient use and occupation of all passengers not wishing to use a sleeping car. And the tickets issued for the use of the sleeping cars, shall have plainly written or printed thereon, "sleeping car," and all persons using a sleeping car shall be furnished with such tickets.

SEC. 3. No Railroad Corporation shall be interested in the additional sum paid for the use of berths in sleeping cars, pursuant to the provisions of this act.

SEC. 4. Nothing in this act contained shall be so construed as to exonerate any Railroad Company from the payment of damages for injuries, in the same way and to the same extent they would be required to do by law, if such cars were owned and provided by the Company.

SEC. 5. The Legislature may alter, amend or repeal this act.

SEC. 6. This act shall take effect immediately.

MONETARY AND COMMERCIAL.

During the past week the demand for money has been slight, though compared with the previous week, more has been done, owing to greater activity in produce; but the supply of currency is large, still exceeding the demand, and no difficulty is found in negotiating strictly first-class paper. Other grades are more difficult to dispose of, and prices range from 8 to 12 per cent. The low rates of exchange, together with the large balances at the East still held by our banks, causes a continued expansion of currency.

New York we quote at $\frac{1}{4}$ premium buying and $\frac{1}{4}$ premium selling. New Orleans $\frac{1}{2}$ @ $\frac{1}{4}$ discount buying and $\frac{1}{2}$ premium selling.

The receipts of flour have been moderate, and the home demand being good, with some demand for export, prices have materially advanced fully 50 cents per bbl., closing with upward tendency. Wheat closes at an advance of 2 @ 3 cents per bushel.

The great event of the week has been the assured success of the laying of the Atlantic Cable; this has produced a great deal of excitement through the country, and a generally hopeful and buoyant feeling for the future. The Frazer River gold mine excitement is causing a revival in trade, that bids us look forward to times of long continued prosperity. The change is very perceptible in the Pacific markets and has already begun to act on our own.

Reports from the country give glowing accounts of the prospect for corn; the weather is exceedingly favorable for its growth.

The earnings of the Little Miami Railroad Company for July compare as follows:

1859.....	\$85,524
1857.....	81,661
Increase.....	\$ 3,863

The St. Nicholas Insurance Company has declared a dividend of 4 per cent. on and after the 16th inst. The Lorillard Fire Insurance Company, a semi-annual dividend of 3 per cent., payable on demand.

The Albion Life Insurance Company having amalgamated with the Eagle Life Insurance Company of London, has declared a bonus of 87 per cent. payable in cash, on and after the 20th inst., at the office of Mr. R. S. Buchanan, 41 Wall street.

The Winnebago Railroad Company are offering a portion of their first mortgage bonds for sale. The first division of the road from Oshkosh to Ripon is, we learn, nearly all graded, and will be ready for the rails in a few days. The Company have issued \$180,000 of bonds secured by a first mortgage on the first division of 19 miles, and have \$95,000 from their cash subscriptions, and still retain \$160,000 of the bonds, of which they propose to sell at the present time, only \$50,000 worth, and to hold the residue until more funds may be required for continuing the work. In addition to these the Company are to receive as the road progresses, \$175,000 of town bonds, the greater part of which they expect to be able to keep intact.

SALES AT THE NEW YORK STOCK BOARD.—Aug. 9.

\$13,000 Tenn. State 6's, '90.....	91½
\$5,000 Virginia 6's.....	92½
3,000 do.....	92½
12,000 Miss. 6's.....	85½
10,000 Louisiana State 6's.....	93
7,000 La C. & Mil. L. Gt. Bs.....	23
1,000 Mich. S. 2d M.....	50
1,000 Chicago, St. Paul & Fond du Lac L. G. B. 23	
1,000 Mich. S. F. B.....	67½
200 Shares New York Central.....	79½
530 " Reading.....	47
100 " Mich. S. & N. Ind.....	23½
176 " Mich. S. & N. Ind. pref.....	44½
66 " Galena & Chicago.....	85½
100 " Cleveland & Toledo.....	35
445 " Chicago & Rock Island.....	75½
50 " Mich. Cent.....	65
125 " Pacific Mail St. Co.....	84½
250 " LaCrosse & Milwaukee.....	4½

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CHARLES D. GIBSON, Treas'r.
RICHARD VOSE, Secretary.

SOUTHERN PACIFIC R. R.

NOTICE is hereby given that all stock in the above-named Company, on which no payment or only partial payment has been made, will be put up by the Company for sale for any deficit due thereon, on the 15th day of SEPTEMBER, A. D. 1858, at the principal office of the Company in Marshall, Harrison county, Texas. The amount due thereon may be paid to the proper officer of the Company, at Marshall, Texas, or at the office of the Company in New York within such time as to be reported to the principal office in Texas previous to this sale. This may save trouble, otherwise the sale must go on. It is hoped that by due payment no stockholder may sacrifice his rights to his detriment in this, the greatest enterprise in our country. All that is required is the deficit due on the requisition of the stock. This is particularly commended to the notice of subscribers in New Orleans. If the sale of stock does not produce the deficit due, each delinquent subscriber will be held responsible for the outstanding amount due.

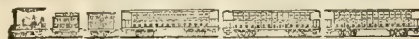
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The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

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NOTICE is hereby given that Charles W. Grannis, Agent of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jy23-1m

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T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, }
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Pelloe Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.
my8 No. 98 Pearl street, Cincinnati

TUBULAR RAIL.

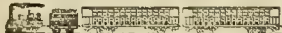
Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.

Norris' Locomotive Works,

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.
Jy-27. RICHARD NORRIS & SON.

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

of 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

from 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 209 South Third St.,

PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.**LOCOMOTIVES.**

4,000 Tons rails, 38 to 61 lbs. per yard 280 tons
rails 49 lbs. per yard 1,000 tons rails 55 lbs.
per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7, '56-2m.]

H. GOODMAN & CO.,
No. 7 Wall st., N.

OLD STAND.**Railroad and Car Findings.**

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,

ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, do from our regular business, respectfully solicited.

ALBERT BRIDGES.

Of the late firm of Bridges & Bro.

JOEL C. LANE

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1124 NEWARK, N. J.

**MOSELEY'S
TUBULAR WROUGHT IRON****ARCH BRIDGES AND ROOFS.**

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The Bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

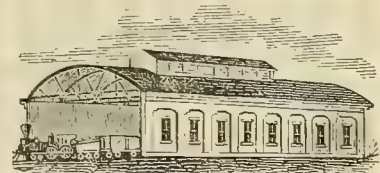
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all Iron, 50 feet width of building, \$23 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 197 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may13. MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 167*

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN and NOYES

METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles, CHAS. W. COPELAND,

Consulting Engineer, 64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 298 H Street, Washington, D. C. april2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



terns, Stationary Fire Engines, Garden Engines and all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855-17

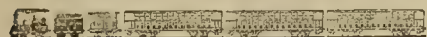
RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 48 lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.
Mar. 25, 11.

VOSE, LIVINGSTON & CO.,
9 South William St., N. Y.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE

-TO-

WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 3:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

☞ FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 6:45 A. M., 3 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

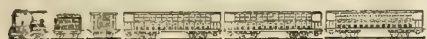
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

ap10 Supt Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

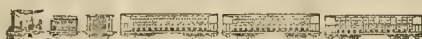
Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,

43 Main St. Cincinnati, O.

1,200 Keas No. 1 Railroad Spikes, 5½ by 9-16th,
low by Corby, Gossin & Co.'s make, for sale very
TRABER & AUERB.
7 Public Landing.

LITTLE MIAMI
AND COLUMBUS AND XENIA

RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

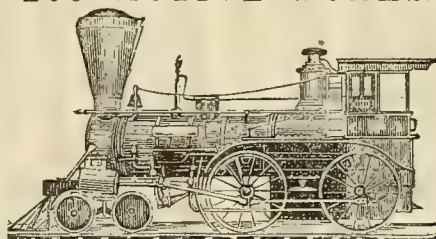
FOR THROUGH TICKETS

And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI
LOCOMOTIVE WORKS.

The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

1858

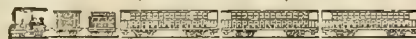
1858.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars.

OHIO AND MISSISSIPPI

(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

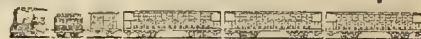
WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
jan8-1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

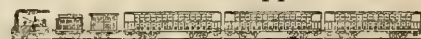
Leave Dayton at 8:05 A. M., 2:30 and 6:30 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:40 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

☞ A Steamer leaves Racine for Chicago every even ing.

☞ Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Supt.
Racine, May 15, 1857. my21

WAREHOUSE
No. 5 FRONT STREET
 Opposite Public Landing,
 Cincinnati, O.

PORTER, ROBE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomeroy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hookh Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Rail men furnished with samples gratis. Spikes Constantly on hand and for Sale. Also, a full assortment of the Pomeroy Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.
 Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
 ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
 WHEELS AND AXLES fitted for use.
 HYDRAULIC PRESSES for pressing Oils and for other purposes.
 MACHINERY of the most approved construction for Flouring and Saw Mills.
 GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
 STEAM BOILERS and WATER TANKS of any size or description.
 SHAFTING, PULLIES and HANGERS.
 WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,
 -AND-

Blank Book Manufacturers,
No. 112 MAIN STREET,
 East Side, between Third and Fourth Streets,
 KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
 Printed to order in the best manner.
 Ruling done to order, of any Pattern.
 Blank Books of every description, with or without printed headings, got up on short notice.
ANDERSON, GATES & WRIGHT,
 (Successors to Jacon ERNST.)
 112, Main Street, Cincinnati

J. T. CRAPSEY,
ATTORNEY AT LAW,
 OFFICE:
N. W. Cor. Walnut & Sixth streets,
 my21 CINCINNATI

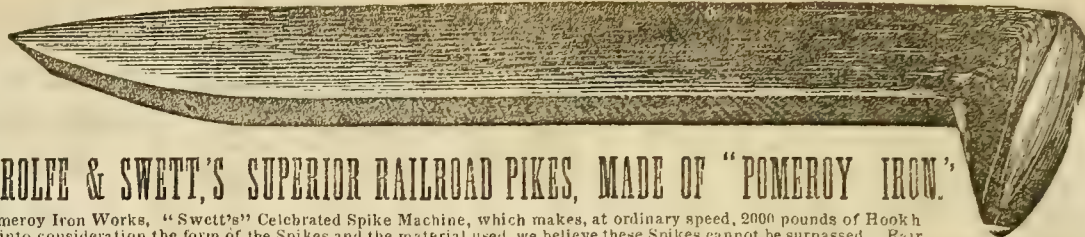
SCHENECTADY
Locomotive Works,
 SCHENECTADY, N. Y.

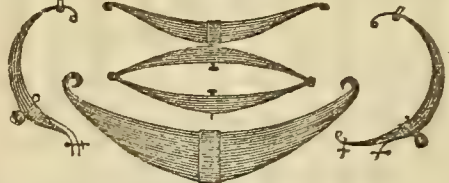
THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,
AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.
 The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't.,
 Aulic3y



MCDANIEL & HORNER,
LOCO-
MOTIVE  **AND CAR**
SPRING

MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDE IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.
 A. C. GRAY, Prest. New Castle Manuf. Co.
 U. WELLS, R. R. Car Manuf. Petersburg, Va.
 I. R. TRIMBLE, Supt. Philad. R.R. Co.
 May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga
 EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga
 THOMAS DOUGHERTY, Master Mach. do.
 THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL,
Wilmington - - - - - Delaware.
 MANUFACTURERS OF

CHILLED WHEELS
 AND
TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
 FOR THEIR

CELEBRATED WHEELS,
 EITHER SINGLE OR DOUBLE PLATE.
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
 In the best manner, at the shortest notice, and on the
Most Reasonable Terms.

an23

Harlan & Hollingsworth,
 WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience is car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable rights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

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RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents, with Time tables only.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents, with a complete Steamboat Directory.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated. No. 1.

CONTENTS.—Peter Funk Shops; Patent Safe Swindling; Pickpockets; Garrothers; Gamblers, etc., etc. Price, 10 cents.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated. No. 2.

CONTENTS.—Lotteries, Gift Enterprises, Employment Offices, Partnership Swindlers, Bogus Ticket Offices, Confidence Women, She Sharks, Indignant Husband Dodge, Hackmen, Hotels, etc. Price, 10 cts. (All sent free by mail.)

DINSMORE & CO.,
 9 Spruce Street, New York.

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

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Railroad Record.

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CINCINNATI:

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Railroad Record

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IMPROVEMENT IN THE MANNER OF LAYING RAILS ON RAILROADS.—A correspondent of the Boston Courier suggests an important improvement in the mode of laying the rails on railroads, so that the end of one rail shall come opposite the middle of that on the other side; thus preventing the jolt when both wheels of the axle pass over the connection at the same time. This has been tried on the Boston and Maine road, and besides the additional security which it gives, it makes the motion of the train more even and continuous, and the whole rail having the effect to lift the wheel over the opposite joint. It seems natural that safety, convenience and economy should result from this simple arrangement; and it is only singular that it has not been tested before.

THE SPECIE MOVEMENTS OF THE WORLD.

September, 1857, saw the commercial circles of Europe and America convulsed; banks tottering; specie withdrawn, and disappearing in every direction. September approaches again, and all this is entirely reversed. Nothing offers a greater contrast than the deposits and movement of specie a year since and the same elements now.

Now all the great reservoirs are filled up, and capitalists scarcely know what to do with their accumulations. But we must not mistake the cause of this. It is not enterprise and great profits which have made this accumulation, but fear and stagnation. These always follow a period of commercial convulsion; and are essentially necessary to a safe recovery.

The great Banks having proved their safety and stability, have become the depositories of capital, which fears the ordinary form of enterprise and investment. We find the following statement of *specie*, in the great Banks at two different periods:

	October, 1857.	June, 1858.
London.....	\$35,850,110	\$86,538,138
Paris.....	35,586,613	85,716,628
New York.....	7,843,238	33,367,263
New Orleans.....	3,230,370	10,312,237
Boston.....	2,563,112	9,410,569
Philadelphia.....	2,071,434	7,055,188

In October, 1857.....	\$86,743,890
In June, 1858.....	232,391,913

Increase.....\$145,648,173

Here is an increase, making nearly *treble* in eight months! This is the most remarkable reaction ever exhibited. If we mistake not, it is an unmistakable indication of another reaction in business. As specie accumulates, capital accumulates; and as capital increases, strength increases, and this strength must be used. For, prudence cautions and alarms the timid money holder for a time; but, when he finds his money is safe, he is as much alarmed lest he should not get interest for it, as he was before that it would be lost. He is uneasy till he makes investments. New enterprises spring up, and tempts him, and before long he is again embarked on a sea of new speculations. We have seen the same individual do this repeatedly, and what is true of one is true of a whole community, and thus it is that commerce renews its energies, and speculations are re-commenced, and the same process of action and re-action goes on from generation to generation.

We have passed through a period of commercial panic, and of stagnation, and we are about to commence one of excited and expanding business. What particular form it will take, no one can tell. It is not unlikely that in the next era of speculation, Mining and Colonization may enter largely. Probably no country on earth either has or can produce such vast and productive elements for mining as our own. The coal which has engrossed so much interest in Pennsylvania; the lead in Missouri; the copper of Superi-

or; and the gold of California, are the beginnings of that immense internal wealth of mines which exist throughout North America. Coal underlies half the Union; and is at last one of the greatest elements of national wealth. The gold which is now found only in a few localities, will probably be found throughout the whole range of mountain ridges from the Arctics to Central America. Silver, we have already seen, is found richly in Arizona and in Sonora, and probably will be found in the same general range of country, for great distances. But, these regions are unsettled and wild. They will require colonization. So will the coasts of the Pacific, and thus mining and colonization will probably be large elements in the new commercial era. In this career, many will doubtless make fortunes, and others lose them. The result will depend on the skill, prudence, industry, and courage of the operators. It will be true of these enterprises, as of old—fortune favors the brave.

RAILROADS—EUROPE AND AMERICA.

It is quite remarkable, when we consider, that the first passenger railroad was made in England, that, in *comparison*, the system of Iron Roads has made so little progress in Europe. The present aggregate of roads, in both continents, are very nearly as follows:

In America.....	25,000 miles.
In Europe.....	21,000 “
In England.....	9,000 “
In North-Western States.....	9,000 “
In Ohio.....	2,850 “

Regarding *surface* only, England has the largest proportion of Railroads. The area of the British Isles is 108,000 square miles. The area of the North-western States about 310,000. The area of Ohio is 40,000. The relative surface proportions, are:

In Great Britain.....	1 mile to 12
In the North-west.....	1 mile to 34
In Ohio.....	1 mile to 14

In Europe they run *three* classes of passenger cars; but, in the United States, but one, except the Emigrant trains, which are kept separate. In Europe, the great mass of what are called “genteel” persons travel, in the second class cars. The same object is practically accomplished here, by reserving a “ladies car,” and excluding those who smoke, or are in any way rude. In the United States the common law of civility prevails, and usage does not allow any decent persons to be annoyed by any kind of ill manners. Where this is the case, there is really no reason for running various classes of cars. If the peculiar institutions of the United States have accomplished nothing else, they have certainly cultivated a high regard for the civilities of life.

The difference in *cost* between European and American roads is very remarkable. The cost of 2,850 miles of railroad in Ohio was \$105,000,000, or nearly \$40,000 per mile.

The cost of 9,000 miles in Great Britain was \$1,565,000,000, or \$174,000 per mile! It is true, that the English Roads are built in a more solid and permanent manner. But, this is not the main reason. One of the largest items of expense on an English Railroad is the *right of way*. On some roads this has cost \$40,000 per mile! The expense of getting a charter is great! The expense of stations is much greater.

The following paragraphs which we cut from the *Merchants Magazine*, contains some very interesting particulars:

Taking, at an average, 70,000 cubic yards to a mile, the earthwork will measure 550,000,000 cubic yards. It is computed that no less than 80,000,000 of miles are annually traversed on these railways. Now, to run 80,000,000 miles per annum, $2\frac{1}{2}$ miles of railway at least must be covered by trains during every second of time throughout the entire year. To work these railways, there must be, at present, at least 5,000 locomotive engines. The number of vehicles of every sort employed can not be less than 150,000. Taking the length of each vehicle at 20 feet, 150,000 linked together in one train would reach from London to Aberdeen, a distance of 500 miles.

Some 111,000,000 passengers travel yearly on these railways at an average of 12 miles each. They perform the journey in half-an-hour. At the average speed of the stage coach, a journey of twelve miles would take an hour-and-a-half. Here is a direct saving of one hour upon every average journey performed by 111,000,000 persons annually. These 111,000,000 of hours saved are equal to 14,000,000 days, or 38,000 years. In the life of a working man, supposing him to work eight hours a day, and allowing at the rate of 3s. per day for his labor, the annual saving to the nation, on this low average scale, would be not less than £2,000,000 per annum.

The average rate of interest upon capital earned by railway shareholders has been in England 3.5 per cent; Scotland, 2.7 per cent; Ireland, 4 per cent. Such a return as this cannot be considered a fair remuneration for capital expended on property subject to such deterioration. In all European countries, the passenger traffic is divided into three classes, of which the proportionate number traveling by each class is nearly as follows:—

	First.	Second.	Third.	Total.
British Isles.....	13	32	55	100
France.....	9	33	68	100
Germany.....	1.5	2.15	77	100
Austria.....	2	24	74	100

RAILROAD COMMUNICATION WITH THE PACIFIC.

It is but a few weeks since the dullness of the business world was startled by the announcement of the discovery of new gold fields of surpassing richness on the banks of Frazer's River. Whether their yield will equal that of California or Australia yet remains to be seen: various and conflicting reports have reached us concerning them, but with all this uncertainty, they have already exerted a great influence; and, if only a half of the *good news* be true, they may yet

exert a controlling influence in shaping the course of events on our continent.

An impetus has already been given to trade, so long stagnant. San Francisco has felt its reviving influence, and the Atlantic ports too share in it. But another and not less important view of their importance is that pertaining to the communication between the Atlantic and Pacific Oceans. When the *furor* for California emigration was at its heights, hundreds despising the long and tedious voyage by the Horn, and the perhaps more dangerous, though shorter route by the Isthmus, undertook the journey from the valley of the Mississippi to the *Eldorado* across a country that had been traversed by few white men, and was considered by every one as a *wilderness*, possessed by wild hordes of Indians, who had not then been taught to respect or fear the *arm* of the *pale face*. Necessity soon produced the Panama Railroad; the uncertainties, however, that must always attend a route through the territory of another power, and that one by no means settled either in its domestic or its foreign policy, caused us to consider the practicability of a railroad through our own country. By this time the *Plains* had been traversed in every direction by trains of emigrants, by bodies of soldiery, and enterprising pioneers; the reports they brought us by no means confirmed the dreary accounts that we had believed of these regions. Explorations were therefore made under the auspices of the Government, to find the most desirable and practicable route for a railroad. Two were found in our own territory, but a more eligible one in the Mexican State of Sonora. Our Government, therefore, purchased of Mexico this territory, and Texas with great liberality incorporated a company with unexampled rights and privileges to build this road, the eastern end of which would run through her domains. Loose and unscrupulous management have overwhelmed this company with difficulties, and it is to be feared that many years will elapse before the road will be completed, unless the whole concern can be regenerated.

Canada has in the meantime built a Grand Trunk Line as far west as Detroit, with the ulterior design of pushing it onward to the Pacific Ocean. Now that the excitement has arisen about the Frazer River Region, over land emigration thither has commenced, with every prospect that the shores of the Gulf of Georgia will be ere long the seat of busy and enterprising people. Great Britain, wide awake to her true interest, has already taken the initiatory steps for freeing this region from the dominion of the Hudson's Bay Company, and speaks more boldly and confidently of that which a few years ago would have been thought too absurd for belief. There is known to be uninterrupted water commu-

nication from the Atlantic Ocean to the base of the Rocky Mountains by means of the Saskatchewan River, which, at its head, approaches very near the head waters of the Columbia, and that too at a point from whence a Railroad could be easily constructed to the Gulf of Georgia.

A cursory examination of the map of the country lying between the advanced settlements of the Canadas and the Rocky Mountains will satisfy any one that that portion of the route at least is practicable; with the pass through the mountains before spoken of, it will be seen that there are no more serious obstacles to the construction of a railroad there, than through any part of our own territory. Of the *operating* of the road when constructed, we will not now speak.

It has been proposed that the Government of Great Britain should guarantee a certain rate of interest for a term of years upon the stock necessary to build this road, or should give a *land grant* sufficiently large for its needs. Either of these would, with the increase of population on the Pacific coast, render the building of the road a matter of certainty.

In the building of this road, England has much at stake. Her commercial supremacy is concerned in the matter. Her Eastern route to her Eastern possessions has long been menaced. Napoleon saw that India was England's vulnerable point, and Russia is steadily pressing on to accomplish that at which Napoleon aimed. Now to reach her richest possessions England must journey through jealous nations or round the extremity of either continent, and she is anxious to shorten the journey, and at the same time have the route entirely under her own control. The Atlantic Telegraph, one great link in the future chain of communication, has been successfully laid; and she will most surely push on her railroad until *Victoria* shall become the entrepot of her Asiatic commerce, and she will then hold undisputed control over the trade of the world.

We may yet forestall her, if we will, and win to ourselves the golden prize, but to do it, we must act more efficiently than we have yet done in the matter. On the 24th of this month a meeting of the Stockholders of the Southern Pacific Railroad is to be held at Louisville, that measures may be taken to extricate the road from its present embarrassments. This is to be the turning point in the history of the road; wisdom and forbearance, and sacrifice of selfish views will be needed in counsel and in action, and when the clouds that now hang over them shall have been dispelled, hearty, energetic action, and an *honest* administration of the funds of the corporation, rather than the financiering of a *Stock Board*, will be necessary to ensure its early completion.

MEMPHIS AND CHARLESTON RAILROAD.

From the report of this Company, read by Samuel Tate, Esq., President, at the Stockholders meeting held in Huntsville on the 9th inst., we learn "that the receipts of the road for the year have been \$964,410 65, the operating expenses \$448,272 80—net earnings \$516,137 85. The gross receipts were but about \$35,000 less than the estimates made in last report. This, too, with a short crop, a commercial panic, and heavy expenses and loss of business from two floods. The total cost and outfit of the road thus far have been \$6,024,642 59, and the net earnings being \$516,137 85, the road has earned 8 57-100 per cent. upon its entire cost and outfit.

The amount paid by way of interest and exchange last year was \$249,873 19, which deducted from the net earnings, leaves them at \$266,264 66. The capital stock of the road being \$2,258,115, the net earnings are thus equal to \$11 80-100 upon the capital stock paid in, after paying interest and exchange.

The funded debt of the road amounts to \$2,692,000 consisting of \$1,093,000 due the State of Tennessee, and \$1,600,000 of its own bonds issued. The floating debt of the road amounts to \$837,991 82. Its actual assets amount to \$157,753 68, and its own bonds unsold \$72,000. Floating debt over assets \$608,258 24. Amount yet to be expended to equip the road \$77,897 50 which will swell the floating debt to \$686,135 74.

The amount of the total net earnings of the road have been \$1,316,476 82—of which \$651,831 42 have been expended in paying interest, and \$654,645 40 have gone into construction. This latter amount, at a proper time, in the opinion of the Directors, should be declared in a stock dividend, thereby increasing each stockholder's stock to that extent.

The past business of the road demonstrates the fact that when the floating debt is paid off, the stockholders may confidently expect a remunerating rate of interest on the capital invested. Its business must continue to increase and become very large and profitable. The stockholders have only to wait a year or two longer, when they will begin to reap what they have sown so nobly.

The Florence Branch, it is believed, will be finished in time to carry off the present growing crops."

In consequence of suspected malfeasance on the part of some of the conductors on the Michigan Southern railroad lately, the company placed a detective on board of each passenger train to see that these officers made correct returns of their receipts. The result was that three of the conductors Woodbury, Hamilton and Bolles, immediately resigned.—*Reg. and Gaz.*

EASTERN RAILROAD COMPANY.

The stockholders of the Eastern Railroad held two meetings in Chapman Hall, Boston,—one by special call, and the second by adjournment.

The special meeting was called for the purpose of acting on any proposition to change the by-laws so as to increase the number of directors. Mr. Howe, the President, presided.

Mr. Parsons of Boston, moved that the number of directors be increased from seven to nine. He argues that some new ideas might thereby be infused into the present excellent Board. He desired a change in the season ticket system, which he believed was proving a great loss—no less than one cent on a passenger between here and Salem.

The President stated that when the present Board came into power, three years since, they found a debt of \$3,119,000, of which \$700,000 or \$800,000 was floating. They at once set to work to secure themselves in the matter of interest, and had not paid anything more than legal interest. He submitted the following:

Whole earnings for 3 years.....	\$2,007,071 28
" expenses for 3 years.....	1,110,831 47
Net earnings for 3 years.....	\$896,239 81
Interest paid.....	418,371 24
Remaining to pay debt.....	\$477,868 57
Land sales and other receipts.....	425,297 06
	\$903,165 57
Paid for extending Saugus Branch, filling Bridges, &c.....	132,847 89
Paid for reducing debt.....	770,317 68
	\$903,165 57

The whole earnings of this road were larger per mile than those of any other road running out of Boston. The receipts from season ticket passengers between Salem and Boston were 19 cents per passage, and to Lynn 13 or 14. The cost of each season ticket passenger was 9 or 10 cents to Salem, and 8 to Lynn. Gentlemen might get a different result from an outside view—that is, by aggregating all the roads and judging by this aggregation of the whole, but that would not be a fair basis. He fully believed that the season ticket business paid a good profit.

Asa Huntington, Esq., opposed the motion, and was followed by William Sturgis, who thought it would be better to make changes in the present board of directors, rather than to call new ones.

On motion of Mr. Sturgis, the motion of Mr. Parsons was indefinitely postponed.

An adjourned meeting was then held to hear the report of the committee appointed to nominate a list of directors, and to elect directors for the year ensuing.

Mr. R. B. Williams, from the nominating committee, unanimously recommended the present Board of Directors for re-election, and the report was accepted without debate.

The following gentlemen constitute the Board:

John Howe, Samuel Hooper, George M. Browne, John C. Lee, Nathan D. Chase, Micajah Lunt, Henry H. Ladd.

GRAND RAPIDS & INDIANA RAILROAD.

At the annual meeting of the stockholders of the Grand Rapids and Indiana Railroad Company, held at the office of the Company in this village, on the 19th of July, the following persons were elected Directors:

James Scribner, Leonard Covell, Grand Rapids, Mich.; George D. Rice, Israel Kellogg, Kalamazoo, Mich.; Patrick Marantette,

Mendon, Mich.; Philip H. Buck, Johnathan G. Wait, William Henry, Joseph Lomax, Sturgis, Mich.; Francis F. Jewett, Lima, Ind.; William S. Boyd, John P. Jones, John L. Doty, La Grange, Ind.

There was a very full vote, and great unanimity prevailed. We are informed that a large majority of the Directors received every vote cast. From the report of the President and Directors, it appears that the affairs of the Company are in a prosperous condition.

On the 20th, the new Board met and re-elected all the old officers; to wit: Joseph Lomax, President; William Allman, Secretary; Richard Reed, Treasurer; and Josiah D. Cook, Chief Engineer.

James Scribner, of Grand Rapids, has taken the contract to clear, grub, grade, culvert, bridge, lay the ties, and in all respects make and complete the road-bed ready for the iron, twenty miles north of this city, on or before the 15th day of October of next year. For this work he is to collect and receive subscriptions, as far as they may go—the company agreeing to pay him the balance, from time to time, as the work progresses; and also claiming the right to pay laborers, in case of the neglect of the contractor to do so, and charge the amount so paid, as payment on the contract.

Mr. Scribner returned to Grand Rapids on Saturday, and this morning a squad of workmen have gone in company with the resident engineer, Yates, to commence work on the line. This promptness, on the part of the contractor, promises well for the fulfilment of the terms of the contract. Similar contracts have been made with Van Lew and Whitney, for the fifteen miles south of Kelloggsville; the work to be prosecuted forthwith, and completed in six months.

LEXINGTON AND BIG SANDY R. R.—In the suit of Bondurant, &c., against the Lexington and Big Sandy Railroad Company, which was pending in the Clark Circuit Court, on petition for sale of said road, it was decreed by the court, that the road and its depots be sold to the highest bidder, to satisfy the plaintiff's demands. We understand that the time and place of sale will be duly published.—*Winchester Chronicle.*

The Board of Directors of the Nashville and N. W. Railroad, met on Saturday at Nashville, and directed the President to let 40 miles of the road, beginning at Hickman, and extending four miles beyond Dresden. They also authorized him to buy iron for the forty miles or for the whole line—at his discretion. Mr. Helner leaves immediately for Nashville, to prepare the estimates, so that the latter can be advertised.—*Hickman Argus.*

THE TRADE OF NEW ORLEANS.—The New Orleans *Crescent* states as evidence of the continued growth of New Orleans, that the gross receipts of cotton this year at their landings have been 1,653,000 bales, against 1,500,000 last year. Of tobacco, 77,000 hogsheads, against 52,000 last year. Of flour, 1,428,000 barrels, against 1,175,000 last year. Of pork, bulk and barrel, twice the amount of last year. Of bacon, in bulk, an enormous surplus. Of coal, 743,000 barrels, against 580,000 last year. Of molasses, 335,000 barrels, against 83,000 last year. Of sugar, 200,000 barrels, against 62,000 last year.

ILLINOIS CENTRAL RAILROAD.

The annexed statement gives the business of the Illinois Central Railroad for July, 1858:

LAND DEPARTMENT.

	Acres.	Value.
Construction lands sold.....	2,636 38	\$35,439 87
Free land sold.....	1,162 69	26,966 96
Interest fund land sold.....		
Total sales for the month.....	3,799 07	\$62,799 85
To which add town lot sales..		3,905 75
Total of all.....		\$66,705 61
Since 1st Jan., 1858.....	36,959 59	503,947 21
Previously.....	1,200,933 78	15,311,440 40
	1,237,893 37	15,817,387 61
Construction bonds cancelled in July 1858.....	\$22,000 00	
Construction bonds cancelled previously.....	701,000 00	723,000 00
Free land bonds cancelled in July, 1858.....	\$6,000 00	
Free land bonds cancelled previously.....	90,000 00	96,000 00
Total bonds cancelled up to 31st July, 1858..		\$319,000 00

TRAFFIC DEPARTMENT.

Receipts from Passengers.....	\$57,744 61
Do. Freight.....	75,052 01
Do. Mails.....	6,558 33
Do. Rent of Road.....	5,466 20
Do. Other sources.....	2,406 53
Total receipts in month of July, 1858.....	147,027 68
Do. in month of July, 1857.....	189,049 18
Do. since 1st of January, 1858.....	1,029,521 04
Do. in same period of 1857.....	1,256,907 78

MEETING OF THE A. L. AND H. R. R. Co.—The Alexandria, Loudon and Hampshire Railroad Company, says the *Buckingham Register*, of August 6th, held a short session in Alexandria last Thursday. The recent subscription to the road, on the part of the State of Virginia, of \$300,000, was accepted, and the directors authorised to receive the \$100,000 subscribed by Clarke county upon certain conditions. The meeting then adjourned *sine die*.

FLORIDA AND ALABAMA RAILROAD.—The citizens of Conecun, says the *Spartan* of the 22d inst., have now taken \$88,000 worth of stock in our railroad; only \$12,000 remains to be subscribed. That this amount will be speedily made up, no one can entertain the shadow of a doubt. Maj. Jay, in his recent circuit of the county, succeeded in raising \$8,000, we are told; a circumstance at once expected and gratifying.

CONSOLIDATION OF RAILROADS.—On Monday last the stockholders of the Salem and Lowell Railroad voted, 1416 to 116, to authorize a lease of their Road to the Boston and Lowell Railroad Company for a term of twenty years, for the sum of \$17,500 per year. This sum is said to give to the bondholders of the Salem and Lowell Road 6 per cent. upon their bonds, leaving the stockholders 1½ per cent. upon their stock.

On Tuesday, the stockholders of the Lowell and Lawrence road came to a similar agreement, voting 1123 to 3 to lease their road to the Boston and Lowell at a rent of 6 per cent. per annum on the cost of the road, which is understood to be \$363,000.

The stockholders of the Boston and Lowell Road have yet to act upon these propositions, but there is little doubt of the arrangements being carried out.—*Boston Mes.*, Aug. 11.

The annual election of Directors of the Atlantic and Great Western Railroad Company has been held at the office of the Company in Mansfield. The meeting was quite a full one, the greater proportion of the Stock being represented. The following named gentlemen were elected Directors for the ensuing year, being, with two exceptions, a re-election of the former Board:

Gen. C. L. Ward, Penn'a; Wm. Coolman, Esq., Revenna, O.; L. V. Bierce, Akron, O.; John H. Chamberlain, Akron, O.; Marvin Kent, Franklin Mills, O.; John Pardy, Wadsworth, O.; Dr. B. Black, Ashland, O.; Dr. Wm. Bushnell, Mansfield, O.; Jacob Riblet, Galion O.; Hon. J. C. Brand, Urbana, O.; Hon. Matthew Birchard, Warren, O.; Seth Haynes, Hartford, O.; Geo. Carlisle, Cincinnati, Ohio.

The new Board did not organize, the officers still holding their respective positions. The Board will not organize until the return of members of the Directory now in Europe, finishing necessary negotiations for the speedy completion of the road.—*Register*.

LEXINGTON AND WEST CAMBRIDGE R. R.—The stockholders of this corporation held their annual meeting in West Crambridge on Wednesday afternoon. Hon. Charles Hudson, the President, read the annual report. The gross receipts for the year ending Aug. 31st, are estimated at \$33,500, a falling off from the average of the three preceding years of \$12,000. The road has been equipped at an expense of \$24,000. The Treasurer's report shows the excess of the receipts over the running expenses for eleven months ending August 31st to be \$3,200.

Charles Hudson, James Dana, Addison Gage, Joseph N. Howe, Samuel Butterfield, John Field and Abijah W. Farrar, were unanimously elected Directors.—*Boston Mess.*, August 11.

TRIAL OF A DAHLGREN GUN.—A Dahlgren gun, which has been on trial at Castle Island, Boston harbor, burst on the 1532d fire. There had been consumed in the proof of this gun about 15,400 pounds of powder, and the aggregate weight of shot and shells fired amounts to 115,000 pounds. When the piece burst, a large fragment, weighing near 800 pounds, was thrown to a great height in the air, and fell about 300 feet to the rear.

UNITED STATES CANALS.

The whole extent of navigable canals in the United States, according to a late table compiled by R. S. Fisher, Esq., and published in *The Railroad Journal*, is 5,439.53 miles. These canals are distributed as follows:

	Miles.
Maine.....	50.50
Massachusetts.....	78.60
New York.....	1,269.86
New Jersey.....	148.70
Pennsylvania.....	1,273.
Maryland.....	208.
Virginia.....	188.98
North Carolina.....	13.50
South Carolina.....	52.50
Georgia.....	28.
Alabama.....	51.70
Louisiana.....	24.75
Kentucky—River Improvements.....	466.50
Illinois.....	102.
Indiana.....	443.
Ohio.....	959.
Croton Aqueduct.....	40.
N. H., Ct., Vt., etc.....	29.94
Total.....	5,439.53

BALTIMORE AND OHIO RAILROAD.

The regular monthly meeting of the Board of Directors of the Baltimore and Ohio Railroad Company was held yesterday morning. The revenue of the road for the month of July, was reported as follows:

	Main Stem.	N. W. Virginia.	Wash'n Branch.	Total.
Passengers.....	\$57,426 63	\$4,269 34	\$39,473 03	\$89,169 00
Freight.....	253,295 56	14,113 17	8,671 80	276,080 53
	\$310,722 19	16,402 51	18,144 83	345,269 53

Compared with July of 1857 these returns show the following result:

	Main Stem.	N. W. Virginia.	Wash'n Branch.	Total.
July, 1858.....	\$310,722 19	16,402 51	\$2,144 83	345,269 53
July, 1857.....	357,357 87	17,251 09	57,191 85	411,800 81
Decrease for July, 1858.....				\$76,531 28

The financial year of the Company commenced with October. A comparison of the revenue of the ten months of the present year compared with the same months of last, exhibits the following results:

	1855.	1857.
October.....	\$470,415 34	\$396,191 85
November.....	423,218 45	386,486 79
December.....	462,085 96	381,143 42
	1858.	
January.....	297,581 87	320,121 87
February.....	350,877 13	280,373 96
March.....	545,447 61	441,649 38
April.....	459,420 53	465,595 65
May.....	341,736 17	401,752 76
June.....	420,838 22	402,591 75
July.....	441,800 61	365,269 53
	\$4,252,272 24	\$3,841,190 16
Decrease present year....	\$411,082 08	

The Treasurer presented the following statement:

Statement of Floating Debt and Available Means.

DEBT.	
Amount of Bills payable.....	\$392,602 21
Balance of interest uncalled for, due 1st April on company's bonds.....	4,000 00
State taxes due on Bonds.....	10,473 65
State's one-fifth of receipts from passengers over the Washington Branch for the half year ending June 30th.....	34,019 00
Interest due July 1st on Bonds of the Northwestern Virginia Railroad Company uncalled for.....	1,260 00
	\$444,955 86

AVAILABLE MEANS.	
Uncollected revenue, which is judged to be the same as on the 1st inst., when it was.....	\$237,978 71
Cash on hand.....	19,201 71
City Stock on hand \$16,186 63, say at \$98 00.....	\$16,156 90
Less amount advanced thereon.....	11,813 90
	4,343 00
City Stock to be received and for which application has been made, \$25,729 05 at \$98 00.....	25,214 47
Bills receivable, due within 15 days.....	11,179 85
	\$297,917 74

The bills payable on the 15th July, the date of the last statement, amounted to.....\$496,468 16
Same at the present date.....392,602 21

Showing a decrease of.....\$103,865 95

J. I. ATKINSON, Treasurer.

Treasurer's Office, Baltimore and Ohio Railroad Company, August 10th, 1858.

PITTSBURGH AND ERIE RAILROAD.—The Erie Constitution states that some eight hundred tons of iron have been purchased for the Pittsburgh and Erie Railroad, and will be received in a few days, when the work of laying the track will at once be commenced. This will lay nearly ten miles of track.

GERMAN EMIGRATION.

The peace of 1815, by restoring the freedom of the seas, opened new countries of commerce to European enterprise, and emancipated the people of Europe from the devastations of War, while the disbanding of numerous armies threw upon their own resources great numbers of soldiers, who were forced to seek abroad subsistence and employment. The struggles of the Spanish colonies against the mother country, attracted numbers of these, most of whom died miserably from fatigue, excesses and violence. The most intelligent, however, found in the resources and freedom of the United States ample employment and promise of reward. The settlement of isolated individuals soon attracted families, and their example was followed, until a regular and increasing current has set in, mostly from the Valley of the Rhine to America. The number of arrivals in the United States has been as follows:

		Per annum.
1790 to 1810.....	130,000	12,000
1810 to 1820.....	114,600	11,460
1820 to 1830.....	203,979	20,397
1830 to 1840.....	778,500	77,850
1840 to 1850.....	1,542,950	154,295
1850 to 1858.....	3,019,851	377,494

Total immigrants.....5,779,920

These are formidable figures, the number per annum has more than doubled in every decade, and they indicate not only the transfer of persons from Europe to America, but also capital, skill and industry. The Germans who arrive are particularly industrious, and of good habits. When this movement set in, after the peace of 1815, it effected an important commercial change at once. At that time the raw bulky produce of America required a large number of vessels to transport it to Europe (Havre mostly), when no return cargoes were to be had. It followed that the produce was compelled to bear two freights. The moment a return freight in emigrants presented itself, that on cotton fell, and the construction of vessels underwent a change to accommodate the new trade. The elegant models which had during the war served for speed and naval qualities, gave place to the kettle bottoms, which stowed more cotton at the official measurement, and left more room for passengers on the return. This new arrangement reciprocally attracted the emigrants to Havre, when the cheap commodious vessels were found. The increasing numbers who traversed France, driven from their homes by misery, and who depended on public and private charity to cross France, alarmed the government, and induced injudicious means of restraining it. It was ordered that no emigrant should be permitted to cross France unless he had first paid his passage to the agent of a vessel from Havre to N. York or New Orleans, and was in possession besides of \$150 per head for each person over 18 years of age, and \$75 for each person under that age. He must also have his passport vize by the French Ambassador at Frankfort. These exactions were too onerous, and as the emigrants could not comply with the terms, notwithstanding that every effort was made by the ship agents to aid them in meeting or evading the requirements, they consequently followed the Rhine down to the other ports, to the great injury of Havre. The merchants engaged in the trade sent agents to pass the emigrants by lending them the necessary money to exhibit at the fountain, and to be immediately returned. The emigrants continued to go to the Northern ports, and Havre never recovered her position, although the

government modified its foolish exactions. The authorities at Bremen were the first to avail themselves of the errors of the French government. In 1849 a law subjected emigrant ships to regulation. The height between decks, the thickness of plank, the room for each passenger, the quantity and quality of the food allowed, were all prescribed, and obligations are imposed upon the vessels to ensure, in case of shipwreck, the transportation of the passengers to the place of destination. The passengers to be admitted on board only when the vessel is quite ready, and to facilitate the sojourn of the emigrants on land, an immense building, capable of lodging 2,000 persons at once, was constructed at Bremerhaven, with every convenience, including hospital. The charge is fifteen cents per day lodging and board. For thirty-six cents per day they get lodging on a good bed, coffee with milk and sugar, white bread for breakfast, soup, meat and vegetables at noon, and a suitable supper. All runners and all interference with emigrants is strictly forbidden, and every means taken to make Bremen attractive to emigrants, even to gratuitous counsel in case of dispute with the vessels or agents, or other parties. By these means Bremen has obtained a large share of the trade. Hamburg has not made the same efforts, although lately societies have been formed for the protection of emigrants, and the government has opened an office to furnish the emigrants with proper information, and to protect them against imposition on both sides the water. We may now see the effect of these changes upon the number of emigrants that left each port in several years:

	Havre.	Antwerp.	Bremen.	Hamburg.	Total
1846....	32,381	4,434	32,372	4,857	74,044
1847....	59,474	14,717	33,682	7,628	115,501
1848....	72,325	14,369	58,551	21,916	167,161
1857....	24,825	13,150	49,449	31,556	118,980

The emigration movement seems to change from year to year. The total from Germany has been as follows, for the last ten years:

Year.	Number.
1848.....	81,695
1849.....	89,102
1850.....	82,404
1851.....	112,547
1852.....	162,301
1853.....	162,568
1854.....	203,537
1855.....	84,761
1856.....	88,983
1857.....	118,990
Total.....	1,187,088
Average per annum.....	118,708

This efflux of persons, if they were only the poor and the miserable, would not be regarded as an evil by the governments they leave, but it is not that they are the most active, intelligent, and well-to-do. The poor and the unfortunate are left at home. The governments have, therefore, made many attempts to check the movement. The King of Prussia offered lands in the grand Duchy of Posen to those who would settle. Bavaria has sought to restrain the movement by giving a monopoly of the contracts for passages to two houses, producing, of course, a greater clandestine migration. In Wurtemberg, Baden and the two Hesses passports are got only with the greatest difficulty, and the emigrant must renounce all national and municipal rights. The causes of migration have furnished matter of much speculation, but there is no doubt but that the hope of improvement here attracts, while misery and political oppression at home repels. Intelligent men wish to escape military service, they wish to profit in the public benefits, for the extension

of which they are taxed; they wish to escape the restraints of corporations and monopolies, and they desire to dispose freely of the fruits of their labor, and to tread their own soil in the quality of free men. On the other hand the whole valley of the boasted Rhine is fraught with miseries second only to what Ireland was. From the lake of Constance to the Dutch frontiers the people are poor necessarily, when feudal tyranny of long centuries was succeeded by devastating wars of a third of a century. In the Duchy of Baden labor is thirty-six kreutzers, or twenty-seven cents per day in good years, and nothing in times of dearth. The bad crop of 1846, the potato disease of 1847, the revolution of 1849, all drove forth thousands, and a population of 1,356,947 souls loses one per cent. per annum by migration.—*Economist*.

EXTENSION OF STEAM NAVIGATION IN THE FAR NORTH-WEST.

We learn from the *St. Anthony Express*, that the practicability of a steamboat route from Breckenridge, by way of the Red River of the North, Lake Winnipeg and the Saskatchewan, to the base of the Rocky Mountains, is now a well settled fact, and that measures are immediately to be taken to test that practicability. A party of gentlemen occupying prominent positions in business circles at St. Anthony, will start about the middle of August for the Selkirk Settlement, with the intention of conferring with Gov. Simpson and procuring through him co-operation of the Hudson Bay Company in the immediate establishment of a line of emigrant steamers upon the route. Two naturalists connected with the Smithsonian Institution, and one of the artist's connected with Frank Leslie's Magazine, will accompany the expedition.

We also find that Lord Burry, a member of the House of Commons, in a recent speech, sketched this same route, and proposed the following method of advancing its development:

With a view to the opening up of a communication between Lake Superior and the Pacific, he would suggest that the system adopted by the formation of a certain ship canal might be very easily applied. In that case 180,000 acres of land were set aside in the State of Mich., and were given in trust for the persons who made the canal, on condition that they finished it; and as it advanced, and they wanted money, part of the land was sold and supplied fund for prosecuting the work. It was found that the sale of these lands, made infinitely more valuable by the canal itself, fully remunerated the shareholders for their undertaking; and he thought it would not be difficult to set aside reserves of land along the line from Lake Superior to the Pacific, and apply that to complete the communication between those two points. With the exception of a single rapid, (which might be avoided by a canal,) navigation of the Saskatchewan offered no difficulty. With this one exception you could take a vessel of considerable size up to the foot of the Rocky Mountains; and at this point there was a gap in the mountains which would interpose no great obstacle in the way of a junction between the Columbia and the Saskatchewan, whose sources were but a little distance apart. Thus a communication would be established with the Pacific, and he hoped some day to see this great work accomplished.

TRADE OF NEW YORK.

The imports at this port for the month of July show a very marked decline, as compared with last year. They have been as follows:

IMPORTS FOR JULY.

	Specie.	Free goods.	Dutiable.	Warehouse.	Withd'n.	Entered.
1856.	\$238,919	1,280,854	19,288,685	2,187,339	4,907,675	
1857.	505,298	2,455,338	29,042,740	20,470,830	6,776,875	
1858.	36,895	1,502,207	14,013,659	3,169,538	2,949,166	

The withdrawals last year from warehouse were large at the new duties, as were also the duties. This year the goods thrown upon the market are \$20,753,172 less than last year, and the goods entered for warehouse are \$3,800,000 less. The cash duties are \$3,387,305 against \$6,937,019. The demand for money has therefore been light, and mercantile engagements very small comparatively. It is long since the imports for July have been as small as they are this year. The shrinking of credit has made a great difference in at least the time when the season commences. The exports do not seem to have been similarly affected. They have been as follows:

EXPORTS FOR JULY.

	Specie.	For goods.	Domestic.	Total.
1856.	\$7,771,901	131,041	6,901,272	14,804,213
1857.	3,628,177	989,754	4,273,696	8,891,820
1858.	2,801,496	347,882	4,771,962	7,921,340

The balance against this port is \$12,000,000, and last year it was \$32,000,000. The amount of money paid for duties and exported in July, this year and last, was as follows:

	1857.	1858.
Duties paid.....	\$6,937,014	3,387,505
Specie exported.....	3,628,877	2,801,496
Total specie paid.....	\$10,565,891	6,189,001
Decline.....		4,376,890

Besides this there are \$16,000,000 less engagements for goods received during the month. On the other hand the domestic produce sent hence is \$500,000 greater, with the prospects of improving markets for the produce abroad for the remainder of the year.

The imports at this port are now altogether \$76,500,000 short of the imports for the same period last year, and the exports are \$18,000,000 less.—*U. S. Economist.*

POPULATION OF CHINA.—The Russian Mission now at Pekin has, in a recent report, made known the result of the late census taken by order of the Emperor of China. The present population is said by this document to amount to 415,000,000; that of Pekin being 1,648,814.

PITTSBURGH, FORT WAYNE AND CHICAGO RAILROAD CO.

The earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Company during the month of July, were as follows, viz:

From Freight.....	\$48,888 56
" Passengers.....	44,917 78
" Mail.....	4,482 29
" Rent of Road.....	5,500 00
" Miscellaneous.....	161 02
Total.....	\$107,949 65
Earnings in same month last year.....	119,556 18
Decrease, (10 7-10 per cent.).....	\$11,606 53
Expenses in July, 1858.....	\$75,802 65
" " 1857.....	108,777 62
Decrease, (30 per cent.).....	\$32,974 97
Net earnings in July, 1858.....	\$42,147 00
" " 1857.....	10,778 56
Increase, (290 per cent.).....	\$31,368 44

INTEREST.

The Minnesota Assembly have passed a bill legalizing the rate of interest in that State at 15 per cent. if the parties make a contract to that amount. But if no special contract is made, the rate shall be 7 per cent. The rates for use of money, will find their true value. Money, like other property, will command all that it is worth in market. Still it is not made free as other property is. Laws are passed in almost every State, fixing penalties upon the lender who receives more than a certain rate for the use of his money. An individual may let his horse at any price he can get—or his house, farm, or ship. But he can not let a thousand dollars in gold for a greater sum per year than the statute names, without incurring a penalty. We question the utility of such laws. They are never regarded. Last fall money commanded 18 and 24 per cent. interest, because it was worth as much in the market, and thousands of loans were made at those rates. Now it is worth only about one-sixth as much as it was then, and millions of dollars lie idle for the want of investments at rates no higher than 6 per cent., and in many cases at 3 per cent. The law can neither drag down the value of money to 7 per cent, nor force it up to that point. The supply and demand increase or depress the value of money as they do of wheat. Laws do more injury than good in attempting to force a value to articles of commercial traffic.

In Connecticut the legal rate of interest is 6 per cent., and the forfeiture in the case of usurious rates is the amount of interest involved—the principal being collectable by law.—*Hartford Times.*

CONNECTICUT RIVER RAILROAD.—At a special meeting of the stockholders of the Connecticut River Railroad Company, held yesterday at the office of the Western Railroad Company, a vote was passed authorizing the issuing of coupon bonds to the amount of \$250,000, having twenty years to run, and bearing six per cent. interest payable semi-annually; the proceeds of \$200,000 of said bonds to be expressly applied to cancel the indebtedness of said corporation to the Western Railroad sinking fund, and the balance to the existing debt of the company, and not to any new work or liabilities.

The Directors were directed not to issue the bonds or any part thereof, at a rate less than one hundred cents on the dollar.—*Boston Mercury, August 4.*

☞ The Maryland Court of Appeals, in the case of the Baltimore and Ohio Railroad Company vs. Wm. Lambern, has decided that railroad companies in that State are not responsible for injuries done to cattle and stock by their cars, in any case in which such cattle, &c., are on the railway tracks through any negligence or fault on the part of the owners of them; that the owner of cattle is bound to keep them in an enclosure or in custody at his peril, for every entry by them on another's possession is a trespass, and this law applies as well to the intrusion of cattle and horses upon the land over which a railroad company is entitled to its franchise as to the property of a private owner. Similar decisions have been made in nearly all the States of the Union, where the question has arisen in their Courts.

NEW YORK BANK STATEMENT.

NEW YORK, Aug. 16.

The weekly Bank Statement shows an increase:

In Loans of.....\$2,481,600

And a decrease:

In Specie of.....\$3,985,380

In Circulation of.....195,476

In Undrawn Deposits of.....513,497

In Nominal Deposits of.....2,419,944

The total amount

Of Specie is.....\$31,150,473

☞ We understand that Mr. Paul Bremond has withdrawn from the Directory of the Houston and Texas Central Railroad Company, for the purpose of uniting with some other capitalists in taking a contract for the construction of the next thirty-two miles of road. The contract has been signed on terms, it is understood, quite favorable for the road, and which secures the completion of the work, as fast as, and according to the requirements of the law.—*Houston Telegraph, July 23.*

GOLDURET.—A metallic alloy named golduret has recently been discovered and patented in England. The new metal is remarkable for its resemblance to gold, and is worked into articles ornate and useful. Sanguine expectations are expressed of its rapid introduction into the manufacturing arts, where the high intrinsic value of the precious material of which it is an imitation has limited the possession of golden ware to the luxurious and the wealthy.

Well and forcibly has the editor of the *London Mining Journal* remarked, that "art strides onward, the Colossus of the day."

MASSACHUSETTS BANKS.—Statement of the average condition of the Banks of Massachusetts, out of Boston, for the four weeks ending July 31, 1858:

No. of Banks.....	123
Capital Stock.....	\$28,742,500
Loans and Discounts.....	49,251,340
Specie in Bank.....	1,890,158
Balances in other Banks not bearing interest.....	4,912,916
Total amount due from other Banks.....	5,698,773
Total amount due to other Banks.....	3,847
Deposits.....	7,470,629
Circulation.....	12,862,697

ALTON AND ROCK ISLAND R. R.—A force of two hundred and fifty men are at work on the grading of this road in Schuyler county, north of Rushville. Stockholders are meeting their installments and the Board of Supervisors of the above named county, have been called on to order an issue of the bonds subscribed by the county. The President and Mr. Champlin are now East for the purpose of negotiating for the iron.—*Reg. and Gazette.*

We understand that the grading of the Pittsburgh and Erie Railroad is now finished to Jamestown, and the track about ready for the ties. Some eight hundred tons of iron have been forwarded and will be received in a few days, when the work of laying the track will at once be commenced. This will lay nearly ten miles of track. The engineers are engaged in locating the line of road between West Greenville and New Castle, which task will soon be completed. The indications are that the road will be ready for trains as far as West Greenville, before the first of January next.—*Pennsylvanian, Aug. 6.*

ATLANTIC TELEGRAPH COMPANY.

The stock of the company is divided into three hundred and fifty shares of one thousand pounds each. The charter of the New York, Newfoundland and London Company, conferring upon it the exclusive right to land telegraph cables on the shores of Newfoundland and other parts of North America, and for twenty five years to do the same thing on the shores of Nova Scotia, was made over to the new company, together with all concessions bearing upon the undertaking which may be hereafter obtained; and all the patent rights of Messrs. Whitehouse and Bright, electricians, which in any way concerned the working of instruments in marine circuits of great length were prospectively secured to it.

In order that the capital subscribed might be entirely applied to the immediate object of the undertaking, the projectors, Messrs. Brett and Field, and Messrs. Bright and Whitehouse, considerably arranged that their compensation for the privileges assigned, and for past expenditure and exertions, should be left entirely dependent on the successful result of the undertaking. The final agreement with these gentlemen was, that upon attaining success, a half-yearly dividend of ten per cent. per annum on the capital should first be paid to the shareholders, and that then one half of any further profit should be given them, and the other half be retained by the company, it having been estimated, upon a very moderate computation of the probable amount of revenue, conjoined with a consideration of the comparatively small working expenses where there can only be two formal stations to be maintained, that a very satisfactory result might be secured to all parties upon this ground.

The proportion in which the shares were taken were one hundred and one in London, eighty-eight in America, eighty-six in Liverpool, thirty seven in Glasgow, twenty-eight in Manchester, and the remainder in other parts of England. George Peabody, Esq., the American banker in London, has been one of the most liberal and devoted friends of the enterprise from the start.

When the telegraph sailed on its last and fortunate mission, the £1,000 shares in the undertaking were offered for sale, in the London share market, at £350, *without buyers*. The successful laying of the cable no doubt raised the shares to par value, and should further experience prove its capability to perform the work expected of it, they will soon command a high premium.

The cost of the cable laid between Ireland and New Foundland is given as follows.

Price deep sea wire per mile.....	\$290
Price spun yarn and iron wire per mile.....	265
Price outside tar per mile.....	20
Total per mile.....	\$45
Price 2,500 miles.....	\$1,212,500
Price 10 miles deep sea cable, at \$1,450 per mile.....	14,500
For 25 miles shore end, at \$1,450 per mile....	31,250
Total cost.....	\$1,258,250

Baltimore American.

STERLING AND ROCK ISLAND R. R.—On this road about one half the grading has been done, and the whole work of grading, tying, building, masonry, and track laying is under contract. The road is to be finished to Erie by January 1st, 1859, and to Port Byron by the following November.

BURLINGTON AND MISSOURI RIVER R. R.

The annual report of the Directors of this Company has just been published. The road as projected runs through the thickly settled portion of Southern Iowa, between the city of Burlington on the Mississippi river and a point on the Missouri, near the mouth of the Nebraska. About 40 miles of road from Burlington west is completed. The Company have operated the portion between Burlington and Skunk River, distance about 35 miles, since June 17, 1857.

The report states that the second division, from Skunk River to Des Moines River, has been put under contract, and that the road will be opened to Fairfield in a few weeks. It is expected that before the next annual meeting the cars will be running over the whole seventy-five miles, from the Mississippi to Des Moines River.

During the year the Land Office Department have determined the location of the lands granted to this road by Congress. The total amount of vacant land within fifteen miles of the road, which can be claimed by the Company, is 312,025 acres; of which 256,095 acres are without interference, and 55,930 acres are claimed by the State as "swamp lands" under the act of 1850. It is thought a large portion of the so-called "swamp lands" may yet become the property of the company. About three-fourths of these lands are situated in the Council Bluffs District, beginning at the Missouri river and extending east about 60 miles.

STERLING AND ROCK ISLAND R. R.

On this road about one-half the grading has been done, and the whole work of grading, tying, building, masonry, and track laying is under contract. The road is to be finished to Erie by January 1st, 1859, and to Port Byron by the following November. Up to this time none of the bonds or securities of the Company have been issued. The company having on hand about \$250,000 real estate securities. This amount will be sufficient to build the road, except the iron and rolling stock, and arrangements are now being made to lay the iron with the first mortgage construction bonds. The road when ready for the iron will therefore be free from debt.

ALTON AND ROCK ISLAND R. R.

A force of two hundred and fifty men are at work on the grading of this road in Schuyler county, north of Rushville. Stockholders are meeting their instalments and the Board of Supervisors of the above-named county have been called on to order an issue of the bonds subscribed by the county. The President and Mr. Champlin are now east for the purpose of negotiating for the iron. A few days since, the contract was let for extending the road from Whitehall to the Springfield and Alton Road, a distance of thirty five miles. The contract for building the Road from Rushville to Beardstown, on the Illinois River, has also been let.

OFFICE OF THE PITTSBURG, FORT WAYNE AND CHICAGO RAILROAD COMPANY, Pittsburgh, August 3, 1858.—"All communications for the President of this company, should, for the future, be addressed to T. Haskins Du Puy, Esq., as President pro tem.; and all communications, orders, instructions or contracts signed by him as President pro tem. will be as valid and obligatory as though signed by the President. By order of the President, A. BRADLEY, Sec'y.

Mr. Du Puy, who is Chief Engineer of the Canal Department of the Pennsylvania Railroad Company, will continue to discharge the duties of that office, in the city of Pittsburg, to which place the duties of his new and high position have called him from this city.

Under the direction of Mr. Du Puy, the Canal Department of the Pennsylvania Railroad Company, has been organized into complete efficiency, and the divisions of canal under his charge have been worked with such close attention and prudent economy as to exhibit astonishing results in receipts over expenses, compared with the revenue of the same divisions when worked by officers appointed by the canal Board.—*U. S. R. and M. Register.*

HEAVY CONTRACT.—Mr. D. Beckel, of our city has recently entered into a contract for constructing 88 miles of the Grand Rapids and Indiana Railroad, commencing at Kalamazoo and running 40 miles beyond Grand Rapids, Michigan. This road crosses the Southern Michigan Railroad at Sturges; the Central at Kalamazoo, and the Detroit and Grand Haven Railroad at Grand Rapids, and is a portion of the line of 350 miles of railroad running from Fort Wayne to Mackinaw. Mr. B. has contracted to complete his portion of the line for twelve hundred thousand dollars, by the first of October, eighteen hundred and sixty.

This road penetrates the finest pine lands in the West; 700,000 acres of which were donated by Congress to aid its construction. When completed, Dayton will be within 350 miles by rail of the best and most extensive pine lumber district in the Union. At Grand Rapids, nearly ninety million feet of lumber are manufactured yearly, where water power is obtained for manufacturing at a trifling cost. At this place thirteen mills are employed at grinding gypsum which is found in that neighborhood. At the end of the line of Mr. B's contract, the Muskega river furnishes water power enough to saw one hundred millions of feet yearly, and the land all along the line is heavily clothed with the most valuable pine timber. When brought into market, these lands must become very valuable, and it is estimated that they will sell for about eight million of dollars, which ensures the completion of this road at an early day. Three lumber men offer to furnish enough lumber to lead three freight trains daily to Fort Wayne as soon as the road is finished, where they can afford to sell it at ten dollars per thousand.—*Dayton Gazette, July 30.*

RAILROAD FINISHED TO OSHKOSH.—That portion of the Chicago, St. Paul and Fond du Lac Railroad, extending from Fond du Lac to Oshkosh, some seventeen miles in length, has been completed and the cars are now running upon it. The completion of this portion of the road secures to the Company 154,000 acres of land and the further right to upwards of a million of acres in addition, as fast as the Company may progress in the construction of the work to Lake Superior. The grant extends over a period of about nine years. The land grant bonds now constitute a first mortgage lien on the road north of Fond du Lac, and on the 154,000 acres of land, and is a second mortgage also on 178 miles south to Chicago, of which 122 miles is now complete and in operation.—*Western Gaz. and Reg.*

THE CANADA COAL HUMBUNG.—The *Toronto Globe* furnishes the particulars of the great coal swindle at Bowmanville, near that city. Joe Balsden the miner, who professed to have discovered remarkable indications of coal in surrounding wells acted the part of a deceiver throughout the whole matter, and, afterward, one of the Bates', proprietors of the farm, and also Elsworth, who conducted the boring operations, joined in the humbug. They obtained the coal without attracting observation, and crammed it down the hole which they were boring. It is difficult to understand the exact motives in the matter, since we can not learn that he made any attempt to sell the land or otherwise to profit by the pretended discovery.

TAUNTON BRANCH RAILROAD.

An adjourned meeting of the Taunton Branch Railroad was held yesterday, the President, William A. Crocker, Esq., in the chair.

The report of the investigating committee was submitted in print. Mr. J. S. Tillinghast moved to refer the report to such board of Directors as may be elected. Mr. Anselm Bassett, of Taunton, opposed the motion; he expressed the opinion that the number of employees, the salaries, and the free passes should be reduced. Mr. Tillinghast remarked upon the propriety of granting free passes in certain instances.

Mr. Wm. Sturgis stated that some discrepancy apparently existed in the report respecting the reserved fund, and explained the matter by stating that the reserved fund was the reserved earnings. At first he had deprecated the act of investing so much surplus in the stock of the Middleborough road, but as it was the act of the stockholders, the directors were blameless.

Mr. Francis Bassett was of opinion that the prospects of the road did not appear in quite so favorable a light as at previous times, and urged the necessity of practising more rigid economy in the management. The Old Colony road had been enabled to pay a dividend by reducing its expenses.

The motion to refer the report was adopted. On motion of Mr. A. Bassett, an addition to the by-laws was made, directing the clerk to send notices of every meeting of the stockholders to them, at least five days before such meetings.

On motion, the Chair appointed Messrs. Peter W. Freeman, T. B. Wales, and Harvey Billings, a committee to examine the accounts of the treasurer.

On motion of Mr. A. Bassett, a vote was passed authorizing the superintendent to give free passes to the stockholders over their own road, to attend meetings of the stockholders in the Taunton Branch Road.

The meeting then proceeded to elect Directors, which resulted in the election of the following gentlemen:

William A. Crocker, William Sturgis, N. H. Emmons, S. Frothingham, E. Baylies.

FIRE INSURANCE POLICIES.

We take the following from the New York "Courier & Enquirer," for Aug. 14.

The decision of the Court of Appeals, that a Fire Insurance Company is not liable to a mortgagee having an assignment of a policy, when the insurer at the time of a loss has no interest in the property has caused a general movement among the mortgage-owners to have inserted in their insurance policies a clause protecting them against this decision. We find that three years ago, the Mutual Life Insurance Company of this city, in anticipation of this trouble and to protect their trusts, had a controversy with the Fire Insurance Companies with this city, and with some effort had a clause inserted to make payable to them as mortgagees holding an assignment of a fire policy, all policies under any circumstances, when the said policies would be payable to a direct insurer having an interest. It seems that a mortgagee can not be a direct insurer and protect

the owner also; whereas the reverse can be done when the owner is the insurer, and therefore the owner should be the insurer.

We hope, in view of the immense amount of property at risk, that the Legislature will at the next session pass a law reversing the effect of the decision of the Court of Appeals, and that in the meanwhile our Fire Insurance Companies will, by the insertion of a general clause in their policies, put all mortgage-holders on an equality with our Life Insurance Companies and Savings' Banks, which have the power to enforce the insertion of such a contract.

The importance to assignees of fire policies to have a clause in their policies to protect them from this decision is so great, that we publish the form generally adopted, and which was first introduced by the Mutual Life Insurance Company of New York:

In consideration of one dollar, to us in hand paid by _____, the receipt of which is hereby acknowledged, and for other valuable considerations, we, the _____ Fire Insurance Company of _____, hereby covenant and agree that all the Policies of Fire Insurance issued by us, which are, or may be, assigned to or held by the Company first aforesaid, as mortgagees, shall be binding upon us, and that the interest of the said mortgagees shall be considered absolutely insured and subject to no plea in bar of their right to recover from us such sum or sums of money as shall save them from loss under such policies in consequence of any fire which may happen, except such loss as may take place by means of any invasion, insurrection, riot, or civil commotion, or of any military or usurped power.

And it is further understood by said Fire Insurance Company, that as soon as any change of occupation rendering any risk more hazardous becomes known, either to the said mortgagees or to us, privilege for the same shall be noted on the proper policy, and said Fire Insurance Company shall be paid by the said mortgagees the additional premium for the entire term of use of said risk during the current year of such increased hazard.

It is also understood and agreed, that in case of loss, and claim thereon, on the part of the mortgagees, when, under the circumstances of the case, the policy may be deemed invalid as to the interest of the mortgagee, they shall, on due notice, and on full payment and satisfaction of their claim, assign to us, the said Fire Insurance Company, the bond and mortgage, and all other securities held by them on the property in question; it being understood that the only object of this agreement is to protect the mortgagees from loss.

In witness whereof, the undersigned duly authorized officers of the said _____ Fire Insurance Company of _____ have executed this agreement.

_____, President.

_____, Secretary.

New York, dated this _____ day of _____, 185____.

Without such a contract, a Fire Insurance policy to secure a mortgage is waste paper, and as there are several hundreds of millions of dollars thus secured, we do not give the matter undue importance.

MONEY AND COMMERCIAL.

August 19, 1856.

The last three or four days has witnessed greater demand for Money, but the supply is still ample, and good paper is sought for at 8 @ 10 per cent. Sixty Day bills on the East are readily negotiated, interest off, with but moderate offerings. There has been no perceptible change in the rates of exchange, and we continue our last quotations.

New York $\frac{1}{4}$ prem. buying, $\frac{1}{2}$ prem. selling. New Orleans $\frac{1}{2}$ @ $\frac{1}{4}$ dis. buying, $\frac{1}{2}$ prem. selling. Boston, Philadelphia and Baltimore quotations same as New York.

Trouble among Wisconsin Banks seems to be wide spread. Banking institutions were being organized under the general banking law at many inaccessible points that were difficult even to locate, and on Monday the Chicago Bankers threw out twenty-six of them.

Advices from New York say:—

Merchants this week have found a little more employment for their time and means, while the bankers who have not been interested in the New Loan have been as idle as before. The grocery and breadstuff trade has been more active, and the improvement in prices of the latter is calculated to stimulate shipments to the seaboard. The foreign inquiry, however, remains very moderate. The rise in sugars is caused by the more favorable news from Europe, and the receipt here yesterday of a New Orleans telegram advising an advance at Cuba, with small shipments to this country. The business in dry goods has also contributed to the increased volume of trade.

The general tone of the money market is the same as noticed by us for several days past.

ERIE RAILROAD—The earnings of the Erie Railroad for the month of

July, 1856, were..... \$389,373 50
Earnings, July, 1857..... 474,693 32

Decrease..... \$ 85,319 82

Letters from Paris assert that there is some expectation of the Credit Mobilier winding up, or that a fusion will be contrived with the Discount Bank of M. de St. Paul.

The Wheat crop of Europe is a full average; Oats and Hay light.

The New York stock market has been more buoyant for

the past week and closes with an upward tendency. The increase is principally with Railroad Bonds, a kind of security that has been out of favor for the past twelve months.

We subjoin our usual stock quotations.

SALES AT THE NEW YORK STOCK BOARD.—Aug. 16.

\$4,800 U. S. 6's, '67.....	114
100 N. Y. State 5½'s, '72.....	114½
5,000 Ind. St. 5's.....	96½
500 North Carolina State 6's.....	96½
\$3,000 Virgin. A 6's.....	92½
5,000 Miss. 6's.....	85½
10,000 do.....	25½
10,000 Cal. State 7's.....	87
\$26,000 Tenn. State 6's, '70.....	92½
4,000 Erie B'ds, '71.....	80
5,000 Mich. S. 1st M.....	85
1,000 La C. & Mil. L. St. Es.....	22½
2,000 Gal. and Chic. 1st Mort.....	96
3,000 Hudson River 2d Mt.....	67½
100 Shares New York Central.....	77½
200 " Erie R. R.....	103½
25 " Pacific Mail St. Co.....	73½
50 " Hud. River R.....	28
50 " Harlem R. R.....	10½
150 " Reading.....	48
85 " Milwaukee & Miss.....	15½
60 " Mich. Cent.....	58½
100 " Mich. S. & N. Ind.....	23½
75 " Mich. S. & N. Ind. pref.....	44½
200 " Panama.....	114
20 " Illinois Cent. R. R.....	75
30 " Clew. Col. and Cin.....	90
45 " Galena & Chicago.....	83½
550 " Cleveland & Toledo.....	34½
100 " Chicago & Rock Island.....	79½
100 " LaCrosse & Milwaukee.....	4

☞ The New Orleans Custom House returns of the value of foreign importations at that port for the fiscal year ending June 30, show the following results as compared with the previous year:

	1858.	1857.
June 30.	June 30.	
In Foreign Goods.....	\$15,666,017	\$22,054,111
In Foreign Specie.....	621,246	1,927,039
Total.....	\$16,287,263	\$24,981,150

☞ That part of the Pittsburgh, Fort Wayne and Chicago Railroad, which lies between Plymouth and Chicago, is rapidly approaching completion. It is expected that it will be ready for operation by the 1st November next.

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

**MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE**

BY HEWSON AND HOLMES,

August 18, 1856.

BONDS.

\$6,000 Little Miami R. R. Co. 6 per cent.	81 and int.
1st Mort. Bonds.....	
\$10,000 Cov. & Lex. R. R. Co. 7 per cent.	45
2d Mort. Bonds.....	
\$3,000 Cov. & Lex. R. R. Co. 7 per cent.	30
3d Mort. Bonds.....	
\$4,000 Cin. Ham. & Day. R. R. Co. 7 per cent.	72
2d Mort. Bonds.....	
\$1,000 Indiana Cent. R. R. Co. 10 per cent.	80
2d Mort. Bonds.....	
\$5,000 Indianapolis & Cin. R. R. Co. 7 per cent.	73
2d Mort. Bonds.....	
\$1,000 Ohio Medical Collage 10 per cent.	65
2d Mort. Bonds.....	
\$600 Col. & Xenia R. R. Co. 7 per cent.	57½
Div'd Bonds of 1862.....	
\$7,000 Certificates of Deposit in Ohio Life Ins. and Trust Co.....	30
\$2,000 Montgomery Co., Ky., 6 per cent. Bonds, due 1863.....	60

STOCKS

84 Shares Little Miami R. R.....	75
25 " " ".....	76
10 " " ".....	77
92 " Columbus & Xenia.....	75
50 " Cin'tl., Ham. & Day., 3 m's.....	45
20 " Farmer's Bank, Ky.....	116½

There has been no alteration in the Exchange Market during the past week, and we continue to quote for sight on New York, Boston, Philadelphia, and Baltimore $\frac{1}{4}$ to $\frac{1}{2}$ prem. New Orleans $\frac{1}{4}$ dis. to $\frac{1}{2}$ prem. American gold $\frac{1}{4}$ to $\frac{1}{2}$ prem. for 60 day bills on the East, interest off with light offerings.

H. & T. C. R. R.—We extract the following from the Fifth Annual Report of the H. T. & C. R. R.

We are gratified to be able to announce forty-eight miles in complete running order. In addition, ten miles beyond Hempstead have been graded.

In the history of all railroad enterprises, the cost of the first sections have been, proportionally, the heaviest. With the experience of the past, we feel safe in estimating the average cost per mile for the entire line, \$19,000. This will not exceed the minimum cost of roads in other parts of the Union.

The earnings for the fiscal year, amount to \$76,957.68. All roads now chartered north of Houston are tributary to it.

SUPERINTENDENT'S REPORT.

Annexed you will please find the gross earnings for the months of March and April:

Receipts for Freight.....	\$17,765 65
" " Passengers.....	5,865 75
	\$23,630 80

OPERATING EXPENSES.

Repairs of Railway.....	\$2,716 53
" Locomotive.....	326 35
" Cars.....	891 71
Transportation expenses.....	2,637 29
Net proceeds.....	16,928 82
	\$23,630 80

HOUSTON & TEXAS CENTRAL R. R.

The Houston Telegraph states that the earnings of the Central Road for the month of July were as follows: Freights \$3,327 31; passengers, \$2,701 20; total, \$6,028 51. Last year, same month, they were, freights, \$922 20; passengers, \$1,491 31; total, \$2,413 61. Increase this year over last year, freights, \$2,405 01; passengers, \$1,306 89; total, \$7,714 90. The Telegraph remarks:

This is 150 per cent. more earnings than last year, with only about 40 per cent. more road. At this rate, the earnings of the present year, will push up close upon \$200,000, and will give a net profit of about 12 per cent on the total cost of the road. This is certainly a good showing for a Texas road.

There are about 125 hands at work on the third section of the Central road, rushing it ahead as fast as possible to get that section within the terms of the charter. The contracts for grading, cross ties and iron are all let. We are informed that over 100 men are at work on the Brenham branch, and it is going on as fast as possible. About two miles of Iron are laid down on the B. B. & C. road beyond Richmond. The Columbia road is all ready for the iron, which is doubtless on the way ere this time. The extension of the Brenham road to Austin is a favorable project in the latter city, and is put upon a basis by which it may easily be secured.

CHANGE OF GAUGE.—The Niagara Falls *Gazette* says:

Workmen commenced on Monday to take up the rails on the broad gauge track between here and Niagara City. The last train of C. and N. F. cars will soon go east, and the work of changing the gauge between here and Tonawanda will be completed probably in the course of next week. In the meantime the C. & N. F. cars will run to Tonawanda, and change passengers for this place to the Buffalo and N. Falls road. It is said Mr. Lapham will remain Superintendent of the road. There is a probability that the whole line from this place to Elmira will be changed to a narrow gauge.—*Buff. Com.*

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,**
no13 10 Wal. at Broadway, New York.

New York Metallic Car Spring Co.

MANUFACTURERS OF GARDNER'S CONICAL

VOLUTE STEEL CAR SPRINGS,

Office, 54 William St., New York.

Railroad Managers, Car and Engine Builders, and others interested in Railroad Machinery and Economy, are respectfully invited to notice the recent improvements in these Springs, and their application. Orders and correspondence solicited.

COURTLAND PALMER, Pres't.
CHARLES D. GIBSON, Treas'r.
RICHARD VOSE, Secretary.

SOUTHERN PACIFIC R. R.

NOTICE is hereby given that all stock in the above-named Company, on which no payment or only partial payment has been made, will be put up by the Company for sale for any deficit due thereon, on the 15th day of SEPTEMBER, A. D. 1858, at the principal office of the Company in Marshall, Harrison county, Texas. The amount due thereon may be paid to the proper officer of the Company, at Marshall, Texas, or at the office of the Company in New York within such time as to be reported to the principal office in Texas previous to this sale. This may save trouble, otherwise the sale must go on. It is hoped that by due payment no stockholder may sacrifice his rights to his detriment in this, the greatest enterprise in our country. All that is required is the deficit due on the requisition of the stock. This is particularly commended to the notice of subscribers in New Orleans. If the sale of stock does not produce the deficit due, each delinquent subscriber will be held responsible for the outstanding amount due.
au5 JEPHTHA FOWLER, Pres., etc.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonsville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.
ap16

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for building-ers of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas filters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address
W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5-tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jj23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

oct29-6m

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, } Alton Ill.
G. R. DYKEMAN, }
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellows Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.
my8 No. 98 Pearl street, Cincinnati

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

- Its density is greater.
- Its welding nearer perfect, and
- Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing

E. W. STEPHENS,
Cincinnati Ohio.

June 17.—lyr.

Norris' Locomotive Works,

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.
ly27.

RICHARD NORRIS & SON.

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

of 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

from 1/4 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 209 South Third St.,

PHILADELPHIA.

ly28

STEPHEN MORRIS,
THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.**LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

J. H. GOODMAN & CO.,
no. 7 Wall st., N.

OLD STAND.**Railroad and Car Findings.**

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,

ENAMELLED HEAD LININGS,

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

ALBERT BRIDGES.

Of the late firm of Bridges & Bro.

eb4tr

JOEL C. LANE

S. C. THOMSON & CO

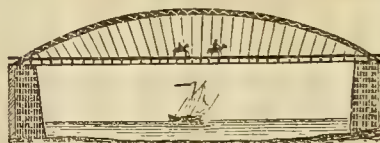
MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Marketst.,

1 n24 NEWARK, N. J.

**MOSELEY'S
TUBULAR WROUGHT IRON****ARCH BRIDGES AND ROOFS.**

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeted always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

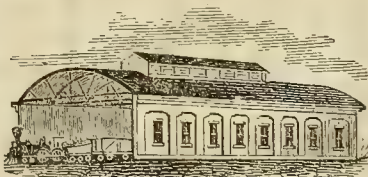
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 60 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may13.

MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the State.

Feb. 16*

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACK-

ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND.

Consulting Engineer,

64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.

No. 298 H Street, Washington, D. C. april2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



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Feb. 1858.

Mar. 25, 18.

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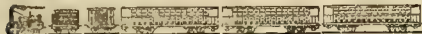
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5 P. M. ACCOMMODATION—Stopping at all stations.

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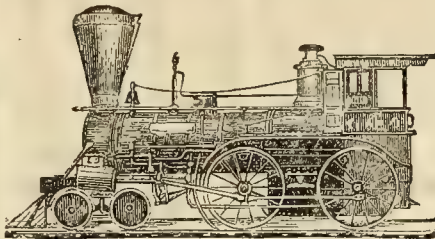
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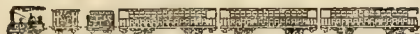
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Monday, May 31, 1858.

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LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

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ALL EASTERN, WESTERN, NORTHERN
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6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the D. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond, for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:30 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

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Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

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H. S. DURAND, President.

ROBERT HARRIS, Sup't.

Racine, May 15, 1857. my21

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Cincinnati, March 5, 1856.

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my21 CINCINNATI**SCHENECTADY****Locomotive Works,**

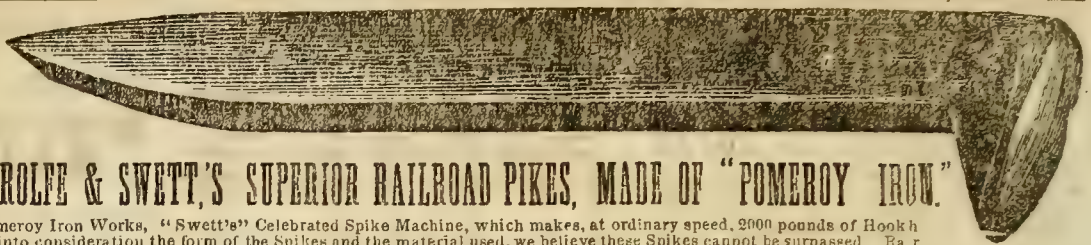
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MOTIVE  **AND CAR**
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May 19

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....AUG 26, 1858.

Railroad Record

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☞ The earnings of the Central Railroad Company of New Jersey, for the month of July, were, \$77,385 84
For the same month last year..... 62,644 89

Increase, 24 per cent.....\$14,640 95

☞ The Houston *Telegraph*, in a notice of the State Controller's report, says:

The total value of the taxable property in the State for the year 1852 was \$80,754,184. For the year 1857 it was 183,594,205, or an increase of 125 per cent. in six years. In that time the taxable value of land has run up from an average of 87½ cents per acre to \$1 47. Negroes have risen in value from \$316 to \$539, and in number from 68,795 to 125,240. These statistics are for 1st January, 1857. The present value of property in the State is not far from \$210,000,000.

☞ A Boston paper says, the capital of the Bank of Mutual Redemption is being briskly paid in. More than one-half of the total capital of \$500,000 has been received to-day (Aug. 2). The Bank will commence operations about the middle of August.

VOL. 6.—No. 27

THE HISTORY OF RAILROADS.

Some time since we commenced the History of American Railroads, which we hope to continue. But there is an earlier history than that. The first question is, when did the first idea of a railroad originate? When did they commence?

There are some who are so infatuated with the idea of ancient excellence, that they suppose railroads to have existed in Egypt and Assyria. The evidence they give of this is that roads composed of "smooth stones, and adapted to the passage of wheel carriages," existed in the vicinity of the Egyptian quarries and pyramids. This may be so; but who would call that a railroad? So the great Roman roads, composed of stone, exist to this day; but no one ever dreamed that they were railroads. There is no evidence that the Egyptian roads had any linear tracks, fixed and grooved for the trajection of cars. This is the idea of a railroad, independent of steam. There is not the least evidence that the Egyptians or Assyrians had the slightest idea of a railroad. Of the applications of steam, of course they had none. In fact, these permanent stone roads have existed in every civilized country, and have been recently constructed in our modern cities. They do not possess really any one element of a railroad. The iron railroad (*chemin de fer* of the French,) is an English invention, and the substitution of iron rail, even in a horse railroad, was unquestionably an immense step practically in the progress of railroads.

Mr. G. W. Smith, in the preface to "Wood's Practice on Railroads," states that "the world is indebted to OLIVER EVANS, a native citizen of Pennsylvania, for the discovery of the latent and unsuspected value and pre-eminent importance of railroads." In 1784 he first conceived the idea of a high-pressure steam engine, and its applications as a motive power to carriages on common roads. He urged the adoption of railroads in place of canals. He was in advance of the age, and charged with visionary projects. In 1799 he commenced the construction of a locomotive steam engine, which was to be tested on a railway. The locomotive was not exhibited to the public till the winter of 1803-4, when it commenced its march through the streets of Philadelphia, in the presence of twenty thousand spectators. Evans urged the construction of a railroad from New York to Philadelphia, and in 1809 urged the importance of a company for that purpose. It is a little remarkable that in that very year was the first success of the steamboat, and that the railroad idea had to struggle through a whole life of steamboats before it could be fairly introduced. At that period he made the prediction—"The present generation will use canals; the next will prefer railroads with horses; but their more enlightened succe-

sors will use steam carriages on railways, as the perfection of the art of conveyance." Certainly this prediction has been very nearly fulfilled.

VON GASTNER, in Germany, proposed, in 1807, a railroad to connect the Moldau with the Danube. This road has since (1829) been constructed by himself. He published an essay on railroads in 1813, the first work in which the subject was scientifically discussed.

In 1812 JOHN STEVENS, of New Jersey, a man of much mechanical skill and ingenuity, published a pamphlet proposing a railroad from Albany to Lake Erie. He knew but little, however, of what had been done and the principles to be applied; hence he made some erroneous statements which discredited his views.

In 1816 Robert Stevenson, in England, commenced some experiments to ascertain the friction of railway wagons. This was intimately connected with the whole subject of railroads. Had there not been an unusual gain in this respect, railroads could not have succeeded.

We come now to the *motive power*. Railroads were used in the celleries of New Castle Upon Tyne nearly two hundred years before steam locomotives were invented. The coal was carried in *railway wagons*. These had been experimented upon, so that considerable advance had been made in the proper form and make of railway carriages before steam locomotives came into use.

The steam engine, it is well proven, had been employed in the same mines, and had been improved by Savory and Newcomen, long before it was even applied to steamboats. But the first application of steam to railroads was to drag carriages up ascending planes upon the coal-roads. In 1808 Mr. S. Cook erected an engine in Durham county, England, to draw loaded carriages of the Uppeth colliery up steep ascents on the Durham and New Castle turnpike. This was the first real application of steam to railroads—but this was for inclined planes only—to overcome steep ascents. We have already stated, however, the discoveries and applications of Oliver Evans, in Philadelphia, which were undoubtedly the first attempts at steam carriages.

The last and greatest applications were those of GEORGE STEPHENSON, in erecting and applying locomotives to railroads. This brings us down to the Liverpool and Manchester railroad, whose completion may be said to be the real era of the passenger railroads.

From the outline we have given of the origin and progress of railroads, it may be seen how gradually and by how many various hands the present railroad system has risen:

1st. The old Roman or Egyptian *smooth stone road*, gives the idea of a road on which may be carried greater loads with the same

power. After capital was once laid out on them they were undoubtedly a great economy in carrying freight.

2nd. We have the invention of use of wooden rails on the coal-roads of England, by which heavy loads could be still easier carried.

3d. We have the invention of peculiar wagons, or cars, suitable to these roads, so that still heavier loads might be carried.

4th. We have the invention and application of iron rails, which still further diminished the friction.

5th. We have the invention of the steam engine more than 200 years ago.

6th. We have the application of steam to the propulsion of carriages, by Oliver Evans, in 1784.

7th. We have the application of the steam engine, by Cook, in 1808, to overcoming steep ascents of railroads.

8th. We have the complete invention of the locomotive, and its application to an iron railroad, in 1825.

Thus, during more than two hundred years, the human mind has in various ways, and by various persons, been constantly employed in perfecting the powerful and wonderfully practical machine which we call a RAILROAD.

STEAM ON CANALS.

For a long time it has been an open question, whether any motive power except horses could be used on canals. Up to the present time, although much has been said about the use of steam, and some experiments have been made with it, it has proved ineffectual. Within a few weeks, however, a boat has been constructed called the *Wack*, which has been run successfully on the Erie Canal. The great objection raised heretofore against the use of steam, was the wave occasioned by it, and the consequent action upon the banks. In the case of the propeller *Wack*, this is done away with, by the simple contrivance of a recess and guard, which also prevent interference of the wheels with the locks, or with the tow-lines of other boats.

He has also proved that room enough can be found in the same boat for an ordinary cargo, as well as for the engine.

We can not, of course, look for perfection in any experimental machine. The *Wack* is no exception. One of her great difficulties is the want of draft; to remedy this, some have thought a greater height of smoke pipe necessary, thereby requiring the elevating of all the bridges on the line of the canal.

The Captain of the *Wack* proposed to remedy the matter by putting up blowers, but this seems to us superfluous; there was the same difficulty experienced in the first introduction of locomotives, and the remedy applied there was, turning the surplus steam into the smoke pipe; the same thing will work in the same way on the canal.

The rate of speed attained by the *Wack*, was not more than six miles an hour; it is true that this is a great deal faster than the horse line, but yet it is not what was expected, nor, if there is any thing in the following remarks of R. G. Rankin, in the Albany Evening Journal, is it all that may be expected.

The boats to which he refers were moved by horse power.

"When started at a low velocity, the boats move apparently along the smooth surface of the canal, meeting with no resistance, other than that of a very small part of the fluid they intersect. If, in addition to this resistance, they are burdened with the obstruction of a small body of water carried on before, it is not perceptible. Let the speed be increased and a body of water rises in front of the boat, preceding it at various distances, dependent on the velocity of the boat, and increasing by degrees till it rises to eighteen inches and two feet, and occasioning such a resistance, that the horses dragging the boat would, if it were allowed to continue, be unable to proceed for any distance. If, however, the speed be further increased, so that the boat advances to and passes the wave, it subsides behind, and the water in the canal becomes again still. If a wave is created, and it is hardly to be supposed that some wave should not be, it is behind the boat, and not before it, and is so slight that in the narrow Paisley Canal, no injury to the banks is perceptible after three years' use."

If this be true, we have all along committed a great error in moving our boats at a rate of three miles an hour; less injury would have been done at nine. In fact, on some canals in other countries, this speed is attained by relays of horses, and the injury to the banks seems no greater than where a slow rate is used.

The successful introduction of steam on the canals, with the speed of ten miles an hour, will work a great change in the moving of heavy freights; the capacity of a canal is of course without limit, save, perhaps, the ability of the locks to pass the boats; and when the steam propeller shall move along with its train of freight boats after it, the canal will prove a more serious competition to railroads, than it has hitherto done.

The cost of propelling boats by steam is about one third that of moving them at the same rate by horse power; the result will be a lower freight tariff, equally remunerating to the forwarder.

For New York City, the steam canal boat will bring about another era similar to that inaugurated by the completion of the Erie Canal, and give it a further and stronger hold upon the commerce of the country. It will effectually cut off the Canadian route, for the Western produce, and retain the trade in its present channels.

The receipts on the Wabash Valley road, for the first week of August, were \$19,600. The month promises to yield about \$100,000.

OUR RAILROADS.

The condition of the railroads of the United States, with few exceptions, is deplorable indeed; and we think there is no exaggeration in saying, that the world has never seen, and will probably never see again, so vast a money interest so utterly prostrated, and with so little prospect of revival.

It is hardly worth while to pause and inquire why this is so, for it is pretty well understood that it is the result of a combination of causes, among which are an injudicious construction of roads and parallel lines where they were not needed—the use of credit instead of money, whereby the costs of construction has been in most cases doubled, and in many quadrupled, with an entail of interest that has, or is rapidly eating up the real value of the investment—incompetency and extravagance on the part of managers, and last though not least, the celebrated political axiom, that "to the victors belong the spoils."

We would not, however, be understood as intimating that our railroad officers are unfaithful to their trusts; for they, with few or no exceptions, stand boldly out in their communities as "honorable men;" but somehow or other, many of them who, a few years ago were as lean as the leanest of Pharaoh's "lean kine," are now as fat and sleek as the greatest nabob in the land; but their poor stockholders have never heard, and probably never will hear, of such a thing as a dividend—except "over the left." On the other hand we know many who have staked their all in some pet railroad scheme, and have been reduced from affluence to penury.

It is to be hoped, however, that this state of things is not to continue forever, and that the day will come when our railroads, at some sort of figure, will become paying concerns. But this is a question of time not easily solved; for if matters are suffered to remain as they are, eternity may be reached before the "good time" comes.

But seriously: we think the owners of our railroads should themselves take matters in hands, and see if something can not be done by which a better state of things can be brought about. It can not be done by railroad officers and employees—it can only be done by the stockholders themselves, coming together in a spirit of fairness, and devising ways and means by which the rivalries, extravagance, inadequate prices, and outrageous follies which have usurped and monopolized the whole railroad world, be put a stop to. This can be done, and should be done at once. If stockholders do not feel sufficient interest on account of their own investments, to move in the matter, they owe it to the whole business world, which is suffering through sympathy, to do whatever is needful to restore order and confidence in the railroads.

It is not our place, even if we had the ability, to say how this desirable work is to be accomplished; but that it can be done, we have no doubt; and we think there would be no difficulty in finding half a dozen persons who, in a short time, could devise plans for bringing about this much needed—nay indispensable reform.

As a commencement of the work, we would suggest that a general convention of railroad men who represent stock or bonds to the extent of \$20,000 or upwards, in the principal lines, be convened at some central point, for the purpose of mutual consultation. In this congress there should be as little of the "war spirit" as possible. It would be better, therefore, that the great competing lines be represented by persons not at present connected directly with the management, so as to keep out the elements of *personal strife*, which now enters largely into all railroad wars.

Now it strikes us that a convention of the leading business men and capitalists of the country, assembled for the common good, can not but result in great benefit to all, even though no direct action be taken in the premises. The free discussion of topics connected with the railroad interests, and the frank interchange of opinions upon the workings of a huge machine like our railroads, and which is but imperfectly understood by the best, can not but be productive of the most beneficial results, and tend greatly toward elevating railway management into a science.

Among the leading topics to be discussed would be the propriety of dividing the *earnings* of great parallel lines; of consolidating the separate small links that go to make up a chain of road between prominent points; the expenses of management; wear and tear of road and cars; interest on investment, and all the *etceteras* that go to make up the cost of transportation, and the consequent establishment of tariff upon a true basis—the cost of performing the labor.

In this we would not be understood as advocating consolidation for monopoly, for exorbitant prices; but simply to urge upon those having the power, the necessity of doing something towards rescuing the hundreds of millions of dollars now invested in railroads from total loss, by bringing order out of chaos, and demanding from those who make their fortunes out of railroads, a fair equivalent for the services rendered, and the capital invested. Nobody asks the manufacturer or merchant to do business for nothing. Then why should the capital in railroads be required to work for nothing and *find itself*? It is to be hoped, therefore, that the *owners* of these concerns will take the matter in their own hands, and we have no fears but that good results will be sure to follow.

RAILROADS IN TEXAS.

The Memphis, El Paso and Pacific road, designed to connect with the Cairo and Fulton, or some other road running to the Mississippi, and to cross and connect with the Central road in Collin county, has 25 miles under contracts, of which 12 is graded in Bowie county. This road will not buy iron till it can make a connection with some other. Its capital stock now amounts to \$970,000, of which \$125,000 has been paid in and the balance is payable in annual instalments of 10 per cent.

The Company are required by charter to grade fifty miles of road by March 1st, 1861. The twelve miles graded thus far, have cost the Company on an average, about \$1,135 per mile. To secure the charter they will therefore need to expend \$56,750, \$125,000 has already been paid in, so that sufficient remains from that already paid in, and the instalment of 10 per cent. due June 1, 1860, to lay the first 25 miles. As soon as the first 25 miles are completed, the State furnishes \$6,000 per mile for 50 miles, and so on for every additional 25 miles further; in addition to this, the company also received from the State, 16 sections of land per mile, the title to four sections per mile when the grading is done, and a conditional title to the other twelve sections per mile, the title to be perfected upon the completion of the road.

The *Southern Pacific* has 20 miles finished and 7 more graded.

The San Antonio and Mexican Gulf Road has 5 miles finished and 20 more graded for which the iron has been purchased on time, and conditioned that the company is able to raise the money to pay the freight from New-York.

We learn more recently, however, that the arrangements for the purchase of the iron, has fallen through.

The Houston and Texas Central Railroad has completed 50 miles, has 10 more graded, and contracts made for the completion of 32½ miles beyond the 50 mile station.

The Buffalo Bayou, Brazos and Colorado road has now 35 miles finished and 25 miles more graded, with iron purchased to finish this amount.

The Sugar Road has 7 miles in operation connecting Houston with the B. B. & C. road, and 43 more graded, with iron, it is presumed, soon to arrive to complete it.

The Galveston, Houston and Henderson road has 25 miles completed and 17 miles more under contract with iron afloat and on hand to finish it, which must be done within three months.

The Texas and New Orleans road has five miles graded and is progressing as rapidly as the weather will permit, having the whole distance 95 miles under conditional, and 25 under absolute contract.

The Washington County road has now four miles graded, with an active force engaged, and twenty miles under contract.

	Miles.
Total amount completed.....	143
" " graded.....	273
" " under contract.....	97½

But little has been done in the last six months; the work during that time has been mostly suspended, and is now being resumed.

THE PROGRESS OF THE MANUFACTURE OF IRON IN THE U. S.

Of all the products of either mines or of human labor, those of iron are not only among the most important, but the most interesting. Civilization can not, in fact, get along without it, and all modern improvements, both in art and machinery, depend upon it. The gigantic mechanical works of modern times must have iron; it is the *alpha* and *omega* of the mechanical arts.

Iron being of such vast importance, it is a great satisfaction to know that the United States abounds with it. About twelve States of the Union have it, not merely in small quantities, but in the greatest abundance. In such States as Pennsylvania, Ohio, Virginia, Kentucky and Tennessee, iron exists in quantities enough to supply the world. Notwithstanding, however, this great abundance, the iron manufacture has not yet advanced far enough to meet the necessities of the country. We still import immense quantities of iron from England and Wales. When we look at the amount of these importations, and consider the inexhaustible quantity of raw material in our country, it seems to us a marvel. Nevertheless, the American manufacture of iron is advancing, and we quote the following facts, derived from government returns and other documents, to show that in time we shall arrive at independence in this particular:

MANUFACTURES OF PIG IRON AND CASTINGS.

	Value.
In 1810.....	\$ 3,616,437
In 1820.....	1,230,276
In 1830.....	4,757,403
In 1840—286,903 tons.....	7,172,575
" Castings.....	9,916,442
In 1850—363,755 tons.....	12,749,727
" Castings.....	25,108,155
In 1856—680,000 tons.....	13,608,000

This estimate, for 1856, was much too small (taken from *Lake Superior Journal*), the details being as follows:

	Tons produced.	Price per ton.
Houston district.....	10,000	\$29 to \$25
Hudson River district.....	80,000	18 to 20
Delaware and Lehigh River dis.....	120,000	16 to 20
Schuylkill River district.....	100,000	15 to 20
Susquehanna River district.....	120,000	15 to 19
Potomac River district.....	120,000	20
Ohio, Cumb. and Tenn. River dis.....	130,000	20

This was altogether too low in both quantity and value. In 1856 the product of Ohio alone was 90,000 tons; but this is less than one-half the product of what is set down in the "Ohio, Cumberland and Tennessee District." So also the price averaged above \$25 00. On the whole we should estimate the product of 1856 at not less than 800,000

tons, valued at \$20,000,000. This is for pig iron manufacture alone. The growth of this manufacture, in 25 years, then stands thus:

In 1840.....	266,000 tons.
In 1850.....	560,000 "
In 1856.....	800,000 "

This is equivalent to about 60 per cent. increase in each ten years, and which would give, for the year 1870, about 1,490,000 tons, and for 1880 about 2,350,000 tons. The actual wants of the country now being about 1,400,000 tons per annum, it will be little short of 1880, twenty years hence, before the manufacture of American iron will actually reach the demands of the country. Hence there can be, at present, no *overdoing* the market. Iron, we know, has recently been depressed in the markets, but the cause is simply that of a financial crisis. The demand will soon exceed the supply. The following interesting remarks are from the article of Mr. Ptetschke, in the *Lake Superior Journal*:

"At present, when consumption doubles the production of England, the markets of the Atlantic States are in reality controlled through English manufactures; and so long as the original cost of English iron makes its importation into the United States under \$20 per ton for pig, and under \$50 per ton for bar, impracticable, so long can the furnaces of this country, in their own markets, compete with advantage against England, and the manufacturing of iron in the United States will increase and be prosperous. A decrease in the price of English iron in the American markets, under the above figures, would that very moment stop the American factories and turn the buyers over to the English markets. The difference in the price of English iron in the English and American market can be put at 80 per cent., including all cost in round numbers of transportation, commission, insurance, etc., amounting together to about 50 per cent., and 30 per cent. import duties. For instance, pig iron worth in Liverpool about 45-50 shillings sterling, costs in New York \$20. The iron-masters of the United States enjoy, therefore, a *natural* protective tariff of 50 per cent., which will always be so, and an *artificial* one of 30 per cent., which, like all other Government taxes, is liable to changes.

The tariff has already experienced several changes, every one of which has somewhat diminished the protection of Government, but at the same time advanced the interests of industry, in teaching it to depend on its own resources. In 1815 the duty on pig iron was \$1 50 per 100 lbs.; in 1818 it was reduced to 50 cents per 100 lbs.; in 1828 it was raised a trifle, to 62½ cents per 100 lbs.; and in 1830 it was again reduced to 50 cents per 100 lbs.; 1842 it was lowered again to \$9 per ton. The present ad valorem duty of 30 per cent. was adopted in 1849. These different changes all exercised an influence on the development of the home manufacturing of iron; but the great differences in the yearly productions must be attributed to other circumstances, amongst which the most important seems to be the higher or lower prices in the English market.

The iron trade of the United States is still in its infancy; it is the offspring of the present century. But when we consider that it equals the whole production of England twenty years ago, and when we think of the immense ore beds of the United States, of

the rapid growth of population, with her increased consumption and her undoubted vigor and energy, then we must give room to the conviction that the time can not be far distant when America can not only supply her own consumption, but will be enabled to meet England as a formidable rival in all other markets of the world.

PITTSBURG, FORT WAYNE & CHICAGO R. R.

The work on the unfinished portion of this road, between Plymouth and Chicago, is progressing rapidly. The energy shown by the contractors gives us no reason to doubt but that their labors will be completed by the first of November. The grading is nearly all completed, and the whole in such a state of forwardness as not to impede the track laying. This is also now proceeding satisfactorily. There are about twenty miles laid west of Plymouth, leaving sixty-three miles still to be laid; and two additional parties are now laying track east and west of the crossing of the New Albany and Salem R. R. The three parties together lay from 1½ to 2 miles of track per day, and in about a month another party will commence laying rails eastward from Chicago. Following the track-laying party is a "ballasting" party, so that, by the time the track is ready for use, it will be in as safe and good condition as any other portion of the road.

The *bridging* is also progressing rapidly. The long pile bridge over the Little Calumet river and marsh, in Lake county, Ind., and which, when finished, will be 4,500 feet long, is now all done but 800 feet, and the pile driving is advancing at the rate of 50 feet per day. There is an efficient force of carpenters at work, preparing the caps and stringers, and if they continue their present rate of work they will be in readiness for the iron by the time the track layers reach them. There are but two other bridges of any magnitude unfinished—the one over the outlet of Wolf Lake, just below the State line, the other over the Calumet river near Ainsworth, Ill. The last will be finished in a short time, the piles being already nearly all in.

The iron also is all provided for; about 1500 tons are now lying at Plymouth, and 2000 tons at Chicago, and iron is being delivered at Plymouth from the rolling mills of Messrs. Wood, Monell & Co., of Johnstown, Penn., at the rate of 150 to 200 tons per day. The chairs and spikes are all either on hand or contracted for. The cross-ties are nearly all delivered along the line of the road, about 9000 being at Chicago and 2000 per week being received from Michigan.

Owing to the personal exertions of J. Edgar Thompson, Esq., the President of the Pennsylvania Central Railroad, the money necessary to carry on the work is promptly and regularly furnished.

Mr. Thompson has placed Mr. F. Haskins Du Puy, Esq., as Pres. pro tem. of the P. Ft.

W. & C. R. R. Mr. Du Puy has had large experience as an engineer and railroad manager, and has been for many years associated with Mr. Thompson in the active management of the Penn. R. R., and is also at present Chief Engineer of the canal department of the Penn. Central R. R. Co.

RAILROAD BRIDGES.

We would call the attention of superintendents and railroad men generally to the subjoined article which we clip from the *Baltimore Sun*; the advertisement of Mr. McCallum, Bristol & Co., will be found in another column.

Almost all our most serious railroad accidents result from the defects of bridges, and a structure that will tend to lessen accidents, even if its first cost may be greater than for a common bridge can not fail to be of interest to those who are connected in any way with railroads.

A SUPERIOR RAILROAD BRIDGE.—*The Northern Central Crossing of the Susquehanna.*—A creditable work has been done by the Northern Central Railroad Company, in the construction of a railroad bridge across the Susquehanna river at Dauphin, nine miles above Harrisburg. The bridge was opened for traffic on the 31st of March last. We have the following interesting particulars of the character, dimensions, and mode of its construction, which would indicate that it is one of the most superior and extensive structures of its kind and class in the country:

"The total length of the bridge is 3,844 feet, divided into nineteen spans—seventeen spans of 210½ feet each, one of 112½ feet, and one of 153 feet. The height of the truss is 30½ feet; width of bridge from out to out 21½ feet. Total quantity of timber 2,321,804 feet, broad measure; of which 1,801,720 feet are white pine, and 520,084 white oak; the total number of pieces of timber in the structure is 23,351; total lineal feet of timber 316,204, equal to about sixty miles in length. Total quantity of iron is 356,164 lbs., of which 211,272 lbs. are wrought and 144,892 lbs. are cast iron; total number of pieces of iron is 91,837, of which 30,795 are wrought iron, and 61,041 cast iron. The lineal feet of wrought iron rods and bolts are 86,786, equal to sixteen and a half miles.

"The bridge is after the plan of 'McCallum's Inflexible Arched Truss.' The truck runs nine feet above the lower chord. The structure was commenced on the 28th day of March, 1857, and was completed on the 31st day of March, 1858, having been but 370 days, or 320 working days, in process of construction. It stands on massive piers of masonry, directly over the falls in the Susquehanna, which rendered the process of raising one of unusual difficulty and hazard, especially as a large portion of the raising was done in winter. The contract was executed by McCallum, Seymour & Hawley, bridge builders, New York, the work proceeding under the auspices of A. B. Warford, chief engineer of the company, and P. P. Dickinson, engineer in charge, under whose more immediate supervision the work was done. From the beginning the work was conducted with energy and skill by all parties engaged, and considering the season of

the year through which it was driven, it has been attended with a fair share of good fortune.

"This bridge illustrates the advantage resulting to railroad companies from the adoption of the most approved form of structure on their roads. On other lengthy railroad bridges, built of timber, the trains are compelled generally to run at the slowest rate of speed, and men are often to be seen upon them engaged in the business of adjustment or repair; whereas in the case of the McCallum bridge at Dauphin, the structure is not noticed in the time tables, and trains dash over it at undiminished speed without danger or damage to the structure.

"Within the past two months there have been three cases, which now occur to our recollection, where insufficient bridges have broken down and precipitated the trains into the gulf below. It is believed that large numbers of the bridges now in use, are of doubtful capacity; indeed, it is known that many are aided by false work and other adventitious contrivances, which infer the weakness of the structure. Under such circumstances the public are likely to become a little nervous, and demand of railroad companies the adoption of structures absolutely safe. Such a course by the companies would undoubtedly conform to true economy. Such is the risk to property and life arising from deficient bridges that it is difficult to suppose that any company should venture to build a poor bridge with a view of saving money."

THE VICTORIA BRIDGE.

From the Montreal Transcript, Aug. 11.

The work for the construction of this noble edifice is now rapidly proceeding, and we had an opportunity a few days ago of examining not only the completed parts of the structure, but also the operations which are taking place on the dams and piers which are not yet finished. We first proceeded over the abutment on the north shore to the tubes which are already placed across the two first spans of the bridge. The work of the riveting of the plates was going on, and the structure rang with the clangor of hammers forming the heads of the bolts. A large number of portable forges were stationed in all parts of the tube and on the top of it, and rivets heated in the fires were supplied to the workmen by boys attending on each forge. It is interesting to see the speed with which iron—a material hardly known a few years ago in the arts of construction—can be formed into edifices adapted to the purposes of man. This speed is much facilitated by the circumstance that all the parts of the tubes are multiplications of the same patterns. The bridge will consist of twenty-four piers, with twenty-five openings or spans, the center about half as large again as the others. These openings are covered by a tube, or rather by a series of tubes, of boiler plate, separated from each other at the ends, and strengthened by angle iron. An article like this is not the place for an account of the reasons which make the tubular form of materials stronger than any other arrangement of them; but we may remark that if the four plates which form the four sides of the tube were laid one upon another, the thickness of the whole would not exceed about two and a half inches, and would not support a fiftieth part of the load which may be safely carried over the tubes. It needs no engineering or mechanical knowledge to be

able to understand that hardly any accumulated thicknesses of such a material, laid in a flat shape, over an opening between 200 feet and 300 feet wide, would support the hundreds of tons weight made up by the component parts of a railway train resting on the middle of it.

The plates throughout the tubes are double, bolted to angle iron beams and girders, and always overlapping each other at the ends. For further security, each joint has placed over it, on each side of the plates, an extra sheet bolted on both sides of the joint, and called a covering plate. The object of all these precautions is to make the tubes resemble as much as possible similar tubes made of one piece of metal.

Many very delicate considerations have to be attended to by the engineer who adopts this tubular mode of construction, in order to give his roadway the greatest strength with the least weight and cost. The condition upon which the attainments of this end depends, is, that the relative strain upon each inch of the surface should be known, and the strength of the metal at that place proportioned to the stress. It is impossible here to give any idea of the data upon which these calculations are made. The result, however, is that the hardest duty must be done by the metal situated at the ends of the tubes, and accordingly this part is strengthened by a considerable addition to the ordinary number of transverse supports of angle iron. As to the plates themselves, the same kind of calculations have determined that those in the bottom and top of the tube should be thinnest at the end and thickest in the middle of the length, while this order is reversed at the sides, and the greatest thickness of plate is used at the ends. The sentences immediately foregoing will prepare the reader for the information that every sheet of iron, and every angle iron upright or girder, has its place in the edifice marked with the greatest accuracy before it is shipped at Liverpool, and that, upon arriving on the bank of the St. Lawrence, it must not vary half an inch from the position for which it was destined. But, perhaps, it will excite wonder at the immense forethought, labor and attention to details, which are necessary for such perfect and long-before hand adjustment, when we state that it is necessary to determine the position of 2,500 different pieces of iron in each of the smaller tubes, or of 62,700 pieces in the whole bridge. This is like numbering the bricks of a house and never putting one in the wrong place. The rivets used in each tube amount in number to 80,000, or to more than 2,000,000 in the entire structure, and, reckoning the heads as separate pieces of iron, we shall have more than 7,000,000 of distinct pieces of metal put together to form the tubular roadway.

The expansion and contraction of metal is another circumstance requiring the attention of the architect in iron. Every one is of course aware of this phenomenon, but perhaps it may be a novel reflection to many that the vast structure, poised so high in the air above the St. Lawrence, and apparently so firmly fixed, is yet going through constant and not inconsiderable changes of dimensions and even of forms, and that instead of its parts being rigidly fastened to their places, the metallic roadway is in fact disengaged from the stone piers, in order to allow the tube to stretch itself on its bed, as our readers are doubtless accustomed to do on theirs. The principal phenomena of expansion and

contraction in these tubes are two. The first is chiefly in the length, which varies, in a summer day, some inch and a-half for each tube covering a single opening, and between summer and winter varies about three and a-half inches. The other is a change in form, arising from the fact that the upper floor of the tube is exposed to the sun's rays, while the lower one is in the shade. The consequence is a greater lengthening of the upper than of the under plates, and a certain flexure of the tube. Such changes, if operating on a mass of iron about two miles long, would be, of course, very difficult to manage. The mode of providing against its inconveniences, therefore, is to divide the whole length of the roadway into thirteen tubes—one over the large central arch 330 feet long, and six on each side of it, each formed of two tubes, and each covering two of the smaller openings or spans of 220 feet. The two tubes thus made into one, therefore, rest upon three piers—across one, and resting by the two ends on two others. The united tube is firmly bolted down to the pier, which supports it in the middle, but the ends rest upon rollers, so that when they are prolonged by expansion the movement takes place without any resistance. The ends of the tubes at the piers where they rest on rollers, are of course not in contact; there is a space of about a foot between them for any play arising from the cause already described.

The weight of iron in the tube over each of the smaller openings, is 300 tons, and over the larger one 900 tons. Thus the weight of iron in the bridge will be about 81,000 tons.

The progress made in laying the tubes this year has been considerable. Four spans are already covered—two on each side—and from this time to the end of the working season, it is expected that two more will be completed each fortnight—making twelve before the setting in of the winter. The setting in of the severe season of our Canadian year will of course retard such a work, but will not entirely stop it, and tube laying will be continued in spite of frost and wind, and rain and snow. Before leaving the tubes we saw a steam riveting machine, which, though it cannot accomplish all the work in that line, owing to the difficulty in moving it, fastens a great many plates before they are put up in their places. It consists of a large steam cylinder, having a piston, on the projecting end of which are a number of dies in the shapes of rivet heads. The plates, with the rivet placed in the proper holes, being then presented to these dies, the steam is allowed to enter the cylinder, and at once forces the dies against the rivets till they are pushed through the holes and clinched.

Descending from the upper works of the bridge, we next took boat for the piers. Of these there are seven completed on each side; two more are rapidly approaching completion, and two are just on the point of being begun. It is expected that, unless some unforeseen event takes place, all the piers but one will be finished during the present year, or at least advanced so far as to permit of the work proceeding during the winter. At piers No. 10 and 17 we witnessed all the processes employed, from the commencement of the day to the laying of the masonry. Of course the first thing to be done is to make a puddled dam round the place intended for the foundation of the pier, from the interior of which the water is to be pumped out so that the masons may proceed with the foundations. The making and maintainance of the dam is

therefore the chief difficulty of the engineer. The piles are driven into the ordinary bottom of the river; but the foundation of the stone work is several feet below, and the consequence is that the excavation required often destroys the foundation of the dam, and breaches constantly occur—all the more easily for the great depth and rapidity of the current. In order to lessen as much as possible the risks of these casualties, the line of bottom on which the dam is placed is rendered as even as possible by working a gravel scoop. This machine, however, constantly comes in contact with boulders and stones of various dimensions, and these have to be raised. For this purpose a diver is always employed, who descends upon the rock to be lifted, and holds the ram by which a hole for the "Lewis" is made. This effected, the impediment is raised by a crane. These stones are of very different geological formations, and have evidently traveled very far from their present site, on the icy embankments by which they were first lifted from their original (what was their original?) resting place. We saw one of twenty tons weight which had been brought up from as many feet below the surface of the river. Occasionally the break in the dam exhibits strange freaks. The water will sometimes rise up like a fountain in the center of the space marked out for the foundation, and it will require many hours of research to find the weak spot whence it has entered. The enemy, however, has to be traced, and, once found, the ingenuity and patience of the engineer soon conquers. Speed is a matter of considerable importance in the construction of works subject to so many accidents as piers built within dams; hence, the workmen are employed in gangs, night and day, the light being afforded by a lamp with an immense reflector. The stones for the piers have been supplied from the quarries belonging to the Grand Trunk Company at Point Claire, and from another quarry on the Richelieu. The stone from the latter is brought down by the St. Lawrence and Champlain Railway. We have to thank Mr. Hodges, the Chief Superintendent of the works for the contractors, and his able lieutenant, Mr. Aikman, for the kindness with which they afforded us all the explanations necessary to enable us to understand the works which we saw going on. They are entitled to congratulations on the success with which they have begun and prosecuted their arduous labors, in a climate and on a river presenting so many difficulties. They expect to finish the entire work with the end of the year 1859, and they will then have erected perhaps the most remarkable specimen of pontine architecture which the world has yet seen.

HOUSTON AND TEXAS CENTRAL R. R.

We have been furnished with the fifth annual report of the Houston and Texas Central Railroad, which has now reached the Hempstead station, fifty miles from Houston. The progress of this road has been steady, and from the report, it would appear that its affairs have been administered economically, and for the best interests of the company. This fact, however, is easily accounted for, by observing that all the officers of the company are residents of Houston, and of the Board of Directors, eight are citizens of our State, one of Boston, and one of Syracuse, N. Y. The interests of the company are identical with the road, and on its success depends their own success in life. No one can too highly applaud the late act of the Legislature

requiring that the offices and officers of our railroad companies shall be located in our own State; and the best evidence that it is a wise provision, is a comparison of the Central with the Pacific Road—the one whose officers and directors are residents, is prospering and moving forward with rapidity, is already a paying institution, conferring immense benefits upon our State and people—the other, with an immensely wealthy company and dazzling prospects—with stockholders and directors scattered throughout the Union, with its office first in New York and then in New Orleans—winds up with an incredible amount of indebtedness, with a sacrifice of its twenty miles of road, its charter and its franchises, for a song, entailing a law-suit which is probably interminable considering the vast interests at stake, and effectually blocking the way of any Pacific railroad which may be built, and securing to Texas a certainty that if it is built within the next ten years, it can not be through our State, or at least that it can not be anywhere near the 22° of latitude.

But the Central road is steadily progressing. Its second section of 25 miles is completed, and the cars now run to Hempstead, into the heart of the rich cotton lands of the Brazos, from where a branch road is soon to be constructed in a direction towards Austin, crossing the Brazos at or near Washington. The third section of the road is to be completed next year, which will take it across the Navisota river, and its prospects are, that within five or six years more it will reach the banks of Red river. The benefits that it will then confer upon the State can scarcely be overrated. The enhanced value of the lands adjacent to it will triply repay the State the sixteen sections which it receives, while the additional taxation will refund the six thousand dollar loan. Its stock, we venture to say, will be at a higher premium than any in the Union, and the benefits conferred upon the citizens and landholders between the Trinity and Brazos rivers will be incalculable. Territory sufficient for two ordinary States will be open to emigration, and the wilderness country above and adjacent to the cross-timbers, will vie with the most fruitful sections of the State in supporting a dense and happy population.

Houston is a favored locality, for she it is who secures the charters, and her citizens deserve great credit, for they are the men who build the roads.—*San Augustine Texian*.

BOSTON AND MAINE R. R.

The annual report of the Directors of this road has been prepared, in anticipation of the annual meeting of the stockholders, which will be held at Haverhill Sept. 8. The total cost of the road has been \$4,221,671 47, exceeding the capital stock \$94,696 95. This excess has been paid from the earnings of the road. The capital has been decreased \$100,000 during the year by the payment out of the earnings, of a loan of that amount to the State, and also of the claim of Mr. Hazen, amounting to \$55,000. A loan from the State of \$50,000 will become due August 1, 1859, and will be met from the earnings of the road.

The gross receipts of the road for the year ending May 31, 1858, were \$770,801 97; expenses of every kind, including renewals, depreciation and improvements, \$465,300 43. Net earnings, \$305,501 54; two dividends of 3 per cent. were paid, leaving a surplus of \$56,159 54.

For the year ending May 1, 1857, the receipts were \$905,914 64, and the expenses \$472,175 26. The net income of 1857 was therefore about \$95,000 greater than in 1858. The falling off in receipts in 1858 was \$77,000 in passengers, and \$61,000 in freight. The expenses were reduced in 1858 about \$40,000, there being a saving in the wood department of \$8,000; repairs of road of \$9,000, &c., &c. The number of miles run in 1858 was 503,770, against 537,770 in 1857.

In reference to general matters, the Directors say:

The history of the past year is one of great interest to this corporation. It extinguished a debt of \$100,000, borrowed twenty years previously, in the days of its youth and financial weakness. Although it was expended in constructing the road, and there were shares enough at the disposal of the corporation, which might have been sold at a small discount, to cancel this loan, yet it was considered good policy to pay it out of the earnings, especially as it could be done without omitting the dividends.

Perhaps in no one year of its existence has this corporation suffered less by the destruction of property or injury to individual. No accident of a serious nature can, it is believed, in any case, be attributed to negligence, or improper conduct of the employees of the road.

A number of bridges on the line of the road have been thoroughly repaired during the year, and it is believed that the property of the road never was in a better condition than at the present time. The accounts of all the agents of the road have been found in a good condition. They are still making experiments in coal, as a fuel, and express the opinion that sooner or later it will supercede the use of wood, except where the latter can be obtained at very cheap rates.

The controversy between the Maine and Cochecho Railroads is discussed, and the Directors express their willingness to submit to the decision of the Supreme Court.

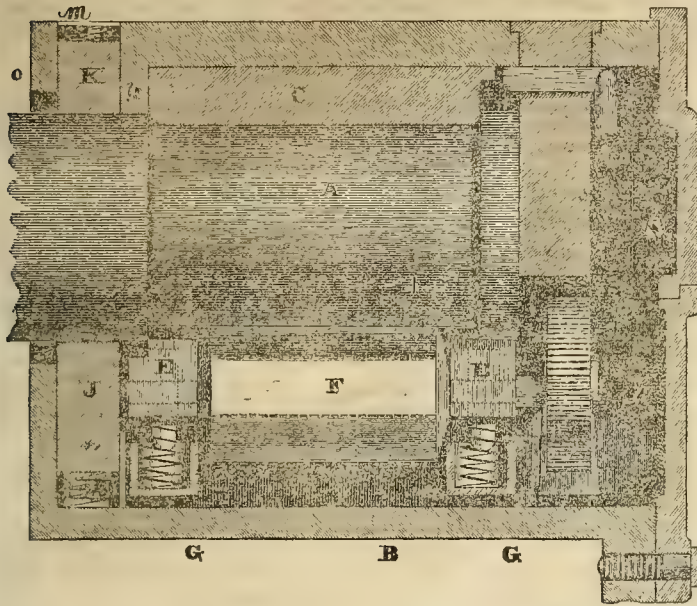
SOUTHERN PACIFIC R. R.—A new complication is added to the affairs of the Southern Pacific Railroad Company, by the action of Governor Runnels, of Texas. That functionary has ordered a suit to be instituted for the purpose of forfeiting the charter of the company, under the following state of facts: In 1853 the Legislature passed an act by which all railroads were required to make a report of their condition to the Comptroller of the State, under penalty, for the first omission, of a fine of \$250, and for non-compliance for three months after notice by the Comptroller, to a forfeiture of the charter.

But the charter of this company was granted in 1852, before the enactment of this law, and it has been assumed that the law does not apply to companies who had chartered rights vested before its passage, and therefore no reports have been thought necessary. The present Board have, however, for greater precaution, complied with the law and made the report; but the Governor had previously ascertained the omissions of former years, and is applying to have the charter vacated.—*N. O. Picayune*, Aug. 14.

✎ The New York and Erie Railroad Company have, it is stated, after a fair trial, abandoned their express business. It is now done by the Express Company, as it was previous to the Railroad Company undertaking it themselves.

GEISENDORFF'S AXLE BOX AND LUBRICATOR.

[Communicated by KNIGHT BROTHERS, Attorneys for procuring Patents, Cincinnati and Washington.]



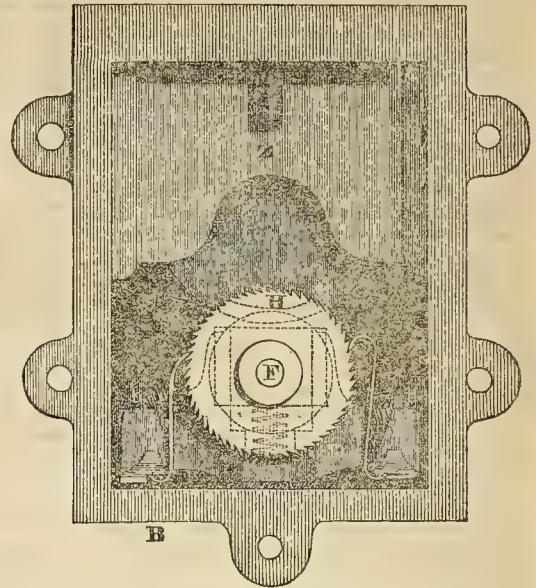
The box represented in the above cuts, by a front and an axial section, is in successful operation on the Kentucky Central and other roads, and is believed to be unequalled in its lubricating arrangements.

An important feature is the *lubricating roller* F, which, whenever the train is in motion, revolves with a slow but positive movement derived from the *vibrations of the axle*.

In conjunction with the above, is a device called the "compensating or clasped washer J K, for retaining the oil in the box, and for excluding dust.

There is also a device called the "lug," Z, which serves to prevent end play of the axle, and causes the car to run steadily, and to "curve" easily.

The external shell G of the box, is so arranged



with reference to the pedestal, as to be easily removed when desired, without disturbing the stay bar or loosening a single bolt or nut.

These improvements are covered by four patents, namely, two of February 9, 1858, one of April 6, 1858, and one of July 13, 1858.

Further particulars can be had of the patentees,

G. W. & J. C. GEISENDORFF,
Indianapolis, Ind.

IMPROVEMENT IN THE TREATMENT OF IRON.

One of the most notable of recent alleged improvements in the manufacture of iron, is that brought forward by Mr. Bessemer, in England, whose claim is for the discovery of a process by which the ore is reduced to wrought iron at one heat, and at a great saving of expense, while the iron thus produced is superior to that obtained by the ordinary method. But this process is ascertained to be no improvement over that in use in the United States some years in advance of Mr. Bessemer.

The American process consists in adding to the pig iron placed in the puddling furnace, such a proportion of oxide of iron that the oxygen of the ore shall exactly suffice for eliminating the carbon of the pig metal as carbonic oxide, or carbonic acid. This proportion is said to be fifteen parts of ore to one hundred of pig iron. The whole is melted up together in the puddling furnace. The oxide at first acts as a flux, but is gradually reduced to pure metal, giving up its oxygen to the carbon of the pig metal. When the operation is complete, the operator finds that he has not only obtained a perfectly fibrous iron without loss, but for every one hundred pounds of pig metal put into the furnace, he draws out an average of one hundred and five pounds of fibrous iron.

The process described by Mr. Bessemer consists in making the fuel already combined with the iron in the blast furnace, do the work which is commonly thrown upon the puddling furnace. There is a cylindrical vessel pierced with holes for the blast, and hav-

ing other openings through which to charge and tap the metal out. This is so placed that the molten metal from the blast furnace can flow into it. Through the metal, while still glowing, a current of air is passed. A violent boiling takes place in the melted iron, and flames and sparks rise from the vessel. The heat is greatly increased, the combined carbon begins to separate from the metal, burning off in an immense flame. As the carbon diminishes, the oxygen of the blast combines with some of the iron, forming an oxide which is a powerful solvent of silica. Scoriæ are consequently found, not upon the surface, but throughout the melted mass. The violent ebullition so mixes up the contents of the crucible that these fusible scoriæ are disseminated through the mass. Being lighter than the metallic iron, they rise to the surface and boil over, carrying with them the silicious matter diffused through the mass, and washing the metal clean.

AUSTRIAN RAILWAYS.

A statement of the Austrian railway, *Francois-Joseph*, appears in the report of the first general meeting of shareholders. The information was supplied by M. Etsel, the engineer. The lines are as follows:

1. Vienna, Oedenburg, Steimanger to Kanisa—28 miles. 2. Pragerhoff, to Kanisa—15 miles. 3. Uj, Szony (Comorn), Stuhlweissenburg to Ofen—19 miles. 4. Kanisa to Esseg—24 miles. 7. Esseg to Semlin—22 miles. Total—157 miles. Each inspecting engineer to have from 15 to 20 miles. Engineers of "section" (resident engineers) to have five to superintend directly. An admin-

istrative inspector, or "traveling director," is stationed with each inspecting engineer. The state of the staff at the end of 1857 was as follows: Traveling directors, 13; inspecting engineers, 12; ditto for surveys, 7; ten working "sections," 86; five survey ditto, 22; total, 140. When the first group is in fair way of construction, the staff will be increased to 180, of whom 36 will belong to the secretary's department. The state of the work is as follows:—From Petau to Kanisa the first lot was contracted for on the 9th of December. Three other lots and the bridge over the Mur, near Callori, followed soon after. The other contracts will be put up for competition very shortly. The company treated with an English house for 650,000 cwt. of rails, at 6 florins 30 kreutzers per cwt.; and they attribute to the Indian war and the late crisis the low price, in spite of which the rails are proved to be of the best quality. They calculate that they have saved two million florins by this favorable bargain. Fifty locomotives are ordered at the Government workshops at Vienna, and thirty at Esslingen, at an average rate of 30,500 florins, duty included.

OHIO CANAL RECEIPTS.—The receipts from the Ohio Canals for the month of July, 1858, as appears by returns to the State Comptroller's Office, were as follows:

Ohio Canal.....	\$ 7,785 98
Miami and Erie Canal.....	12,469 20
Muskingum Improvement Canal.....	2,448 00
Hocking Canal.....	348 62
Walhonding Canal.....	44 04

Total.....\$33,906 11

MEMPHIS, CLARKSVILLE AND LOUISVILLE
R. R.

The President of the Memphis, Clarksville and Louisville Railroad furnishes the following information with reference to the progress of that work:

The work under contract does not extend beyond the first section of thirty miles. The work heretofore done has also been confined to this section, beginning at the State line, and terminating near Bowling Green, in Stewart county. According to the Engineer's estimates, one-half the work on this section is done. The reason for confining the work to this section is obvious. The law giving to the road State aid, requires its completion before the aid can be received by the company. And the work is now in a state of progress which justifies us in believing that it will be completed and ready for the iron by or before the first day of April next.

The bridges on the Red and Cumberland rivers are under contract, the first to be finished by January next, and the latter by or before the first of January, 1860. In a few weeks, we expect to have the Tennessee river bridge under contract, to be finished by the first of May, 1860—at which time it is expected to have the cars running from our Kentucky terminus to a point of intersection with the M. and O. road. That the cars will be running from this place to a point of junction with the Kentucky end of the road, by May next, is almost certain. Much depends, however, upon the prompt payment of calls by stockholders. The money, if not derived from this, one of its legitimate sources, must be raised either at a great sacrifice of bonds, or at excessive rates of interest—all of which less must ultimately fall upon the stockholders. The liberal spirit indicated by the prompt payments made during the last month, is highly encouraging to every friend of the road, and a continuation of the same promptness will ensure its speedy completion.

MONETARY AND COMMERCIAL.

No new feature has been developed in the money market since the date of our last issue. Money continues abundant, but the same careful scrutiny is maintained with regard to names. First class to fair names range from 8@12 per cent., 9@10 being the general figure. Eastern Exchange continues dull, the rates being the same as our last. New York, $\frac{1}{4}$ prem. buying, $\frac{1}{2}$ premium selling. Boston, Philadelphia and Baltimore quotations the same. New Orleans $\frac{1}{2}$ and $\frac{1}{4}$ discount buying, $\frac{1}{2}$ premium selling. Bankers checks on the East range from 40@50 cents, but few drawers below 45. On Tuesday, about 30,000 New York sight, was sold to a dealer by a country banker at 30. No demand for banker's checks on New Orleans.

The discredited banks of Wisconsin are mostly reinstated in favor, and the others are taking steps to regain a firm position. Many of them propose to establish redeeming agencies at Madison. Many of those lately discredited, are now being taken at 5 per cent. discount; and most of those now at 10@20 per cent. discount will be promoted to the second class in a few days. Wisconsin banks in good credit are 13 discount.

In New York the supply of money in open market continues large, and the great degree of ease that we have noticed for some time, still continues, and demand loans are affected with as great ease as ever. We notice however, an advance of $\frac{1}{2}$ per cent. on short paper, and one per cent. on 4 and 6 months paper. The New York weekly Bank Statement of Aug. 23, shows

An increase in Loans, of \$2,994,000

And a decrease:

In Specie of \$2,562,000

In Circulation of 108,000

In Undrawn Deposits, of 425,000

There has been an advance during the past week in

wheat and flour, but the market closes with a decline from the advanced rates, of 2@3 cts. for wheat, and flour of 25 cts. per barrel. Holders, however, retain great confidence, and manifest little disposition to fall.

In the New York stock market, there has been confidence exhibited among holders of good stocks, and but little done in speculative stocks; for the latter, the bears have had it mostly their own way. We notice an advance in Michigan Central, $\frac{1}{4}$. Cleveland and Toledo $\frac{1}{4}$. Illinois Central, $\frac{1}{2}$. Galena and Chicago $\frac{1}{2}$. Pacific Mail Steamship Company $\frac{1}{4}$.

The St. Louis State Savings Institution, (Isaac Rosenfeld Jr., Cashier,) has declared a dividend of six and a half per cent. on its capital stock, (\$500,000) out of the net earnings of the last six months. At the beginning of the period covered by this dividend, but 53 per cent. of the capital stock has been paid in. The dividend is declared on the whole amount of stock. This bank was one of the few which maintained specie payments during the crisis of 1857.

The earnings of the Central Railroad of New Jersey, for July, 1858, were as follows:

July 1858, \$77,265 84

For the same month last year, 63,644 89

Increase, 24 per cent \$14,640 95

The New York and Erie Railroad Company have, after a fair trial, abandoned their express business. It is now done by the Express Company, as it was previous to the Railroad Company undertaking it themselves. No reasons are publicly assigned for the step.

The following are the receipts on the Cleveland and Toledo Road for June and July, 1857 and 1858:

1857. 1858.

June, \$71,228 \$57,981

July, 63,818 52,565

Total, \$135,046 \$110,541

Decrease, \$24,500.

A suit has been commenced on \$37,000 of the Sinking Fund (1875) Bonds of the Erie Railroad Company. By the terms of this issue, the principal of the bonds falls due upon the non-payment of the coupons. Within the past eight months several suits on the same issue have been instituted, but for some reason have not come to trial.

The receipts of the Michigan Central Railroad for the first week of the present month were \$31,355 against \$36,907 44 for the corresponding week of the last year.

John P. Yelverton has resigned the Presidency of the Sandusky, Dayton and Cincinnati Railroad Company. The stockholders met at Sandusky on Tuesday, to elect a new Board of Directors, who will choose a successor to Mr. Yelverton. The latter gentleman returns to New York to engage in other business.

The following is a statement of Tolls received on the New York Canals, during the 2d week in August, 1858, and also the total amount received from the opening of navigation up to August 15th, in the years specified below:

	2d week in Aug.	Total to Aug. 15.
1847.....	\$91,082	\$1,955,888
1848.....	70,805	1,451,294
1849.....	66,422	1,463,380
1850.....	83,485	1,406,377
1851.....	93,704	1,702,121
1852.....	90,937	1,515,451
1853.....	85,747	1,557,609
1854.....	77,410	1,415,281
1855.....	75,713	1,263,015
1856.....	94,159	1,176,536
1857.....	70,750	994,564
1858.....	63,888	1,048,038
Decrease from 1856.....		\$930,250
Increase over 1857.....		51,134

BANKS OF SOUTH CAROLINA.—The aggregate results of the official monthly statement of the condition of the Banks of South Carolina we give below:

Liabilities.	
Capital Stock.....	\$14,888,151 93
Bills in circulation.....	6,698,718 99
Net profits on hand.....	1,745,961 93
Due Banks in this State.....	2,193,991 58
Due Banks in other States.....	623,883 34
All other dues bearing interest.....	20,109 05
State Treasury for Current Fund.....	209,900 56
do Sinking Fund.....	1,663,666 53
do Loan for rebuilding Charleston.....	1,593,388 05
Cash deposited, and all other moneys due, exclusive of Bills in Circulation, profits on hand, balances due other banks, and money bearing interest.....	3,397,228 85
Total Liabilities.....	\$32,036,230 81

Resources:	
Specie on hand.....	\$2,079,874 25
Real Estate.....	683,431 47
Bills of other banks in this State.....	645,616 55
Bills of Banks in other States.....	21,958 00
Due from banks in this State.....	893,445 81
do other States.....	1,125,808 81
Notes discounting on personal security.....	10,789,883 01
Loans secured by pledge of our own stock, do other stocks.....	516,296 55
Domestic Exchange.....	885,909 90
Foreign Exchange.....	6,115,713 88
Bonds.....	801,002 56
Total.....	1,334,746 14

Investments in Stocks.....	2,193,187 13
Suspended debt and debt in suit.....	1,691,712 56
State Treasury.....	113,249 99
Branches and Agencies of State Bank.....	1,489,990 40
Bonds for rebuilding Charleston.....	151,207 48
Interest and expenses of State loan.....	68,174 49
Money invested in every other way than is specified in the foregoing particulars.....	822,223 18

Total Resources..... **\$32,036,230 81**

EXPORTS OF GRAINSTUFFS from the United States to Great Britain and Ireland, since 1st September, 1857.

From	Flour	Meal	Wheat	Corn
	Brls.	Bush.	Bush.	Bush.
New York...Aug. 17	532,626	484	5,273,437	1,757,114
New Orleans Aug. 7	283,782	...	731,766	974,248
Philadelphia Aug. 14	84,296	123	165,642	376,954
Baltimore...Aug. 14	96,935	...	213,076	251,228
Boston...Aug. 14	3,621	...	...	8,920
Other ports Aug. 13	54,411	...	128,597	3,920

Total 1857-8..... **1,275,783** **37** **6,512,518** **3,372,444**

Total 1856-7..... **862,096** **686** **7,507,312** **4,712,333**

Increase..... **413,687** **21** **994,844** **1,399,919**

Decrease..... **...** **...** **...** **...**

Total 1855-6..... **1,612,451** **872** **7,515,878** **6,255,995**

Total 1854-5..... **161,585** **5,533** **297,077** **6,732,104**

To the Continent:

	Flour	Wheat	Corn	Rye
	Brls.	Bush.	Bush.	Bush.
New York...Aug. 17	124,481	246,691	10,618	7,903
Other ports.....	173,434	152,400	6,030	...

Total..... **297,915** **355,091** **16,648** **7,991**

Total 1856-7..... **461,011** **2,733,355** **543,590** **216,172**

Total 1855-6..... **732,952** **2,457,777** **273,810** **1,953,299**

Total 1854-5..... **7,770** **3,975,308,228** **35,569**

CANAL RECEIPTS.—The receipts on the canals, for the week ending August 18, 1858, were as follows:

Ohio.....	\$2,748 53
Miami and Erie Canal.....	2,597 44
Muskingum Improvement Canal.....	200 00
Hocking Canal.....	97 59

*** Total.....** **\$5,644 02**

The decrease, compared with corresponding time last year, \$1,786,75; of which sum \$653,07 was on the Ohio canal.

RAILROADS IN TENNESSEE.

[From the Memphis Eagle and Enquirer, Aug. 14.]

On yesterday we had a conversation with Col. Payne, State Commissioner of roads, and learned the following facts with regard to the extension of railroads in Tennessee.

He says that there will be more iron laid in Tennessee this year than has ever been laid in any one year.

	Miles.
The East Tenn. and Virginia road has laid.....	27
The Cleveland Chattanooga will lay.....	30
In East Tennessee.....	57
Winchester and Alabama.....	15
Tennessee and Alabama.....	15
Louisville and Nashville.....	30
Edgfield and Kentucky.....	30
In middle Tennessee.....	30
Mobile and Ohio will lay.....	60
Memphis and Ohio will lay.....	25
In West Tennessee.....	85
Total in the State.....	232

Col. Payne says too, that there will be more road bed prepared for the iron this year than ever before in the same time. This is a very remarkable condition of things, and it shows the astonishing resources of our people, who, despite the extraordinary pressure of the past twelve months, have been steadily pushing on so large an addition of road improvement.

An additional item of interest which we gather from Col. Payne, is, that there is now in active operation in this State, 670 miles of railroad; that, by the first of January next, there will be 875 miles running, and that by the first of January, 1860, the number of miles in active operation will then be 1,146.—Colonel Payne's entire familiarity with the progress and condition of roads in this State renders the above statement perfectly reliable, and it is with great pleasure we lay it before our readers.

The receipts of the New York and Harlem Railroad Company were:

In July, 1857.....\$93,364 66
In July, 1858.....91,393 94

Decrease.....\$1,970 72
The expenses of July, 1858, are \$25,795 77 less than those of July 1857.

The earnings of the New York and Erie Railroad for July were:

Earnings, July 1858.....\$380,373 50
Earnings, July 1857.....474,693 32

Decrease in 1858.....\$85,319 82

The traffic receipts of the Great Western Railroad of Canada for the week ending 13th August, 1858, were:
From passengers.....\$23,718 18
From freight and live stock.....7,319 24
From mails and sundries.....1,399 72

Total.....\$32,437 14
For corresponding week of last year.....36,498 92

The earnings of the Cleveland and Mahoning Railroad for July have been as follows:

From passengers.....\$4,624 32
From freight.....7,325 38
From coal.....9,180 41
From mails.....369 50

Total.....\$21,599 66
Operating expenses same time.....7,918 55

Net earnings for month.....\$13,681 06

The following is a statement of earnings of the Buffalo and State Line Railroad Company for the months of July, 1857 and 1858:

	Passengers.	Freight.	Other sources.	Totals.
1857.....	\$41,628 38	25,771 35	1,150 00	68,549 73
1858.....	30,925 58	24,635 16	1,280 60	65,841 34

Increase.....\$1,702 80
Decrease.....1,136 19

The following is a statement of the earnings of the Pennsylvania Central Railroad for the month of July, and since January 1, as compared with last year:

	Gross earnings.	Expenses.	Net earnings.
July 1858.....	\$390,216 61	245,314 37	140,902 24
July 1857.....	404,955 40	280,304 80	124,650 60

Increase.....\$1,702 80
Decrease.....1,136 19

January 1 to
Aug. 1, 1858.....2,986,148 89
Same period
last year.....2,981,009 26

Increase.....\$5,139 63
Decrease.....196,386 62

The Canal Department is also doing well. The earnings of the canal in July, 1858, and since January 1, have been as follows:

	Gross earnings.	Expenses.	Net earnings.
July, 1858.....	\$19,812 72	11,101 66	8,711 06
Jan. 1 to Aug. 1, 1858.....	58,847,088 68	65,290 05	19,448 63

Net earnings of the canal from August 1, 1857,
to Aug. 1, 1858.....\$19,243 40

Net earnings of the canal from Jan. 1, 1858, to
Aug. 1, 1858.....19,448 63

Net earnings of the canal from August 1, 1857,
to Aug. 1, 1858.....\$38,592 02

THE NEW USURY LAW IN CANADA.—The Canadian Parliament have passed an act changing the law of interest. Hitherto the legal rate has been six per cent., but by the new act individuals may allow and exact on any contract or agreement any rate of interest or discount that may be agreed upon. Banks are, however, forbidden to reserve or take a higher rate of interest or discount than seven per cent., and are prohibited from paying interest upon deposits.

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's Patent Inflexible Arched Truss Bridge, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON,
no13 10 Wal. ar Broadway, New York.

New York Metallic Car Spring Co.

MANUFACTURERS OF GARDNER'S CONICAL

VOLUTE STEEL CAR SPRINGS,

Office, 5 1/2 William St., New York.

Railroad Managers, Car and Engine Builders, and others interested in Railroad Machinery and Economy, are respectfully invited to notice the recent improvements in these Springs, and their application. Orders and correspondence solicited.

COURTLAND PALMER, Pres't.
CHARLES D. GIBSON, Treas'r.
RICHARD VOSE, Secretary.

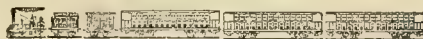
SOUTHERN PACIFIC R. R.

NOTICE is hereby given that all stock in the above-named Company, on which no payment or only partial payment has been made, will be put up by the Company for sale for any deficit due thereon, on the 15th day of SEPTEMBER, A. D. 1858, at the principal office of the Company in Marshall, Harrison county, Texas. The amount due thereon may be paid to the proper officer of the Company, at Marshall, Texas, or at the office of the Company in New York within such time as to be reported to the principal office in Texas previous to this sale. This may save trouble, otherwise the sale must go on. It is hoped that by due payment no stockholder may sacrifice his rights to his detriment in this, the greatest enterprise in our country. All that is required is the deficit due on the requisition of the stock. This is particularly commended to the notice of subscribers in New Orleans. If the sale of stock does not produce the deficit due, each delinquent subscriber will be held responsible for the outstanding amount due.

au5 JEPHTHA FOWLKES, Pres., etc.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI
SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and No Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galeburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Duquith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

to 9 P. M. H. C. LORD, President.
W. H. NOBLE, Gen'l Ticket Agent.

G. W. MORRILL. G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of
C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN,
ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard;
500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON,
feb5-1f 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

ly23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

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T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, } Alton Ill.
G. R. DYKEMAN, }
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all Kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Siding Saws, Concave Felloe Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.

No. 98 Pearl street, Cincinnati

TUBULAR RAIL.

Railroad Managers will be interested in an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over ANY RAIL hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and
Its durability superior.
Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.
The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.
June 17.—1yr.

Norris' Locomotive Works,

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size,

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch. Jy 27.

RICHARD NORRIS & SON.

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

of 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

from 1/2 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc. Warehouse, 209 South Third St., PHILADELPHIA.

STEPHEN MORRIS,
THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.**LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

Feb. 7. '56-2m.]

A. H. GOODMAN & CO.,
no. 7 Wall st., N.

OLD STAND.

Railroad and Car Findings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

**Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,**

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,

Portable Forges and Jack Screws.

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, de from our regular business, respectfully solicited

ALBERT BRIDGES,
Of the late firm of Bridges & Bro.
JOEL C. LANE

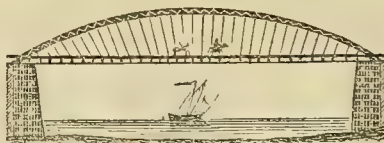
S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,
1 n2j NEWARK, N. J.

**MOSELEY'S
TUBULAR WROUGHT IRON****ARCH BRIDGES AND ROOFS.**

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

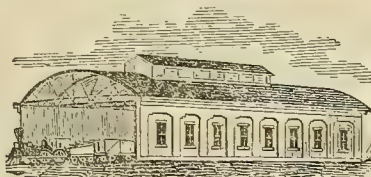
The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 60 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 167* JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gages, Indicators, Steam Whistles

CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer,
No. 298 H Street, Washington, D. C. april 2

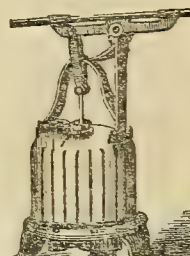
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—

are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855.—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard. "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858. VOSE, LIVINGSTON & CO.,
Mar. 25, 58. 9 South William St., N. Y.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

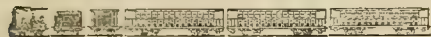
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads. for the West and South, as above.
E. J. PECK,
Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

1,200 Keen No. 1 Railroad Spikes, 5½ by 9-16th,
low by Corby, Gossin & Co.'s make, for sale very
TRABER & ABERG,
7 Public Landing.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

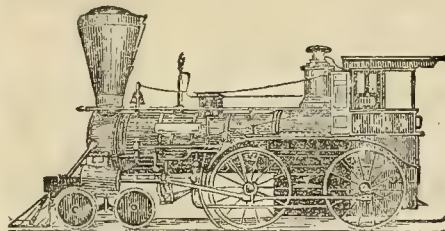
FOR THROUGH TICKETS

And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.
E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.30

MOORE & RICHARDSON.

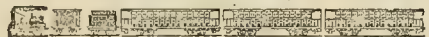
1858. 1858.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars,

OHIO AND MISSISSIPPI

(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, WALLACE & CO.,
jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

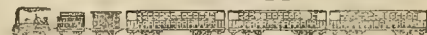
Leave Dayton at 8:05 A. M., 2:30 and 6:00 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Sup't.
Racine, May 15, 1857. my21

WAREHOUSE
No. 5 FRONT STREET
Opposite Public Landing,
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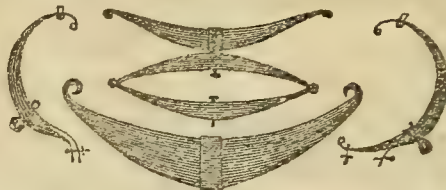
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RAILROAD FROM CINCINNATI TO THE CUMBERLAND GAP—KENTUCKY CENTRAL.

A correspondent of the Cincinnati *Gazette* (signing himself *B.*) writes from East Tennessee, pointing out the number of Railroad lines that center there,—the great natural advantages of the country intermediate between that and Cincinnati, and his wonder and astonishment that Cincinnati is not connected with Knoxville by railroad! He may well express astonishment; for, in no part of the United States would a railroad be more advantageous, or produce greater results than in the one to which he refers. To Cincinnati it would be worth half as much, at least, as all her present roads put together. It would connect her with thousands of miles of railroad, and country, which, at present, contribute little or nothing to her prosperity. In the midst of the intervening country, say 160 miles from Cincinnati, the traveler now finds himself as much cut off from all intercourse with the world, as if steamboats, railroads, and telegraphs were never invented! He finds himself in the midst of a people who get news but once a week, and travel on horse-back, or in a lumbering old coach! What is the consequence? No new town,

no factory, no new enterprise rises up of any sort. Even the soil is uncultivated; and the mines of coal, iron, and salt lie idle. This, too, in a country which was the first inhabited of any west of the Alleghanies; which was traveled by the white settlers, when Ohio was an unknown wild, except the few villages of hostile Indians. It is by this very process of inert and listless indifference to the great enterprises of the age, that Kentucky has comparatively stood still, by the side of Ohio; and has half its people and a tenth part of its Railroads! If Kentucky had the Central completed from Lexington to the Gap, she would levy tribute on all her neighbors, both North and South. They would be obliged to traverse her territory, and buy her produce. And is the completion of this work so great a matter, that it is impracticable? We well know the fright people have got about railroads, and the suspicion with which they are regarded; but, notwithstanding all this, we affirm it is both practicable and most desirable. Let us consider first the reasons for it; and secondly, the means.

1. The reasons are of the most pressing kind. They are pressing upon several parties. They are pressing upon Kentucky, a large part of whose natural wealth has remained utterly useless and undeveloped for want of inland communications, which would cause settlements, and the easy carriage of its products. Next, Cincinnati has an immense interest at stake. No communications past, or to come, have opened, or can open, such an extensive new trade and traffic, as that which will connect the great but secluded region of South-Eastern Kentucky, East Tennessee, South-Western Virginia, Western Carolina, and upper Georgia, with Cincinnati. The case is too palpable to require the least argument, or estimate upon advantages. Thirdly, the motives press strong upon the companies of railroads which concentrate at Cincinnati; for an immense business, derived from the South, will undoubtedly be carried to Cincinnati for distribution over the northern lines. Lastly, the companies at present engaged in the Central (the Covington and the Danville Companies), have a life interest in it. They can not make good profits till the whole is complete. Finally, even *Stockholders*—capitalists—will have an interest in constructing this road; for, just imagine 5,000 miles of road south of the Cumberland Gap united with 5,000 north of the Ohio, by a line about one hundred and twenty miles long, and who can doubt its profit. Such a road will be exactly in the position of the Cleveland and Buffalo Road (the most profitable line in the United States) uniting all on one side with all on the other, *without competition*. There is, in the various interests thus united in favor of this enterprise, a strength and weight which is far greater than

is required to accomplish the object, did they *think so*. The only real difficulty is the panic and discouragements under which railroads now lie. Must this be always so? Must reason and interest both be laid aside for an unreasonable fear—a mere shadow in the way? We think not. The day is near at hand, when men will no longer be frightened by their own ghosts.

Going back, however, to the reasons: Let us note the vast array of railroads which will communicate with the Cumberland Gap, from the other side. For, it must be recollected, that by the aid of the Tennessee grants, two roads are pressing on the Cumberland Gap—one from it, or near Knoxville, and one from Abingdon, Virginia. Let us now see the roads not now connected with Cincinnati, which will be *directly and immediately* united at Cumberland Gap, with the Kentucky Central:

1. To Charleston via. the Gap, Dalton and Augusta.....	560 miles.
2. To Savannah via. Macon.....	292 “
3. To Wilmington (N. C.) via. Manchester	196 “
4. To Norfolk via. Lynchburg and Petersburg.....	601 “
5. To Richmond via. Petersburg.....	92 “
6. To Montgomery (Alab.) via. Atlanta.....	175 “
7. To Memphis (Tenn.) via. Chattanooga.....	447 “
8. To Nashville via. Chattanooga.....	151 “
9. Branches of these roads connecting with various towns and places.....	2,341 “

Aggregate.....4,775 “

No part of this is included in any other part; but, after the first, each is only an addition to what was before stated.

From this table, we see, that at Cumberland Gap, a railroad from Cincinnati would connect with every city and town of any consequence on the Southern Sea Board; Richmond, Petersburg, Norfolk, and Lynchburg, in Virginia; Raleigh, Wilmington, Greensborough and Beaufort, in N. Carolina; Charleston, Columbia, Cheraw, Greenville, and Yorkville, in S. Carolina; Augusta, Savannah, Macon, and Atlanta, in Georgia; Montgomery, and West Point, Alabama; Knoxville, Nashville, and Memphis, Tenn., with many other smaller places. There is at present an indirect communication with some of these places, and we do actually carry on some trade with Tennessee, and the upper part of Georgia; but, what we thus do under great difficulties, is just enough to show how great, how incalculable would be the advantage of opening this great chain of internal communication.

Such are the *reasons and motives* for the completion of the Kentucky Central. Let us see whether there are any *means* by which it can be accomplished.

2. THE MEANS.—If we mistake not, from Nicholasville (to which the cars now run,) to the Gap is about 130 miles. If the road is built for money, it can be made (although a rather difficult route,) for *four millions*. This is a large sum, in itself, but compared with the object, it is a small one. We readily admit that this road considered merely as a

commercial enterprise, can neither be built by subscription or by loans. If made, it must be made chiefly by parties interested. Who these parties are, we have already shown. They are fully able (if they are willing,) to do it.

First, there are the counties, in Kentucky, through which the road will pass. These are Gerard, Boyle, Lincoln, Rockcastle, Laurel, and Knox. These five counties certainly ought to be able to raise \$1,000,000—even if it were raised by tax in three years. Nobody can doubt their ability to do this! If the road were made, their property and population would be quadrupled. We undertake to say, that in less than one generation, it would be increased tenfold. If railroad experience has taught nothing else, it has taught one thing clearly and absolutely—that the land and property through which they pass, increase in value far beyond any cost of the road. Suppose, then, that the counties through which the road passes, contribute *one million* to its construction.

Next we have the Kentucky Central (1st Division,) whose Stockholders and Bondholders are more interested than all the rest of the world; for, if made, it will make the 1st Division one of the best roads in America. We know the Company can not raise money easily; but the individuals can. Let the bondholders and stockholders of that division raise \$500,000. Next we have the two great lines of road from Cincinnati to Cleveland, and Cincinnati to Sandusky, who have ample credit and means. An immense traffic from the Kentucky road would come over them. Let them raise \$500,000. Then let the merchants and property holders of Cincinnati raise \$500,000. If this be done, we shall have \$2,500,000 of *bona fide* stock. Then put on the road a single and *only* mortgage for \$2,000,000 at seven per cent. Such a loan, on such a basis, will be taken at fair prices. We shall have \$4,500,000, fully enough to make and stock the road.

Is there any thing really impracticable in this? Some will reply—yes. What? Why some of these parties *won't* do it. Very well. That is only assuming that men will not act according to their clear interests. Perhaps not. But we have shown clearly that the plan is practicable—if the parties in interest are willing. That is all we proposed to do. The pressing interest upon each and all of them is obvious. We have often written on the subject, and present it again, in hopes that it may interest some who were not formerly on the stage of business.

The contract for laying the iron on the first ten miles of the Erie and Pittsburgh Railroad was awarded to J. S. Casement, on Tuesday. The probabilities now are that it will be in running order in January next.

OHIO AND MISSISSIPPI RAILROAD.

Called Meeting of Stockholders.

REPORT OF INVESTIGATING COMMITTEE.

The Stockholders of the Ohio and Mississippi Railroad met in this city on the 25th, to hear the report of the committee appointed in June last to investigate the affairs of the Company. The meeting was pretty fully attended, and a good feeling prevailed.

The report, which was presented by Prof. O. M. Mitchell, covered the whole ground of controversy between the stockholders and the associates. This report in connection with the proposition made by Aspinwall and associates to the Company in 1856, and the contract between the parties, enables us to get a pretty clear idea of the real state of affairs.

As the report, and accompanying documents are very voluminous—occupying an entire page of the Cincinnati Gazette, we shall have to confine ourselves to giving a synopsis of its more important points; and in order to make the subject as clear as possible, we shall reverse the order of the documents as presented to the meeting, and give them in the order of time.

THE PROPOSITION.

On the 23d January, 1856, Mr. Sam. S. M. Barlow, "in behalf of W. H. Aspinwall, Jos. W. Alsop, Henry Chauncey, Sam. W. Comstock, David Leavitt, Chas. Gould, David Hoadly, and their associates," submitted a proposition to the President and Directors of the Ohio and Miss. R. R. Co., "to finish their work from Cincinnati to Vincennes, within eighteen months from the 1st day of May next [1856] upon the following conditions:

"First. The road is to be put in complete running order according to the original plans, before the reductions made by Mr. Post in June last, and with sufficient furniture and equipments, and with the necessary depot and water stations, and turn outs. The work on the road to be proceeded with as vigorously as circumstances will permit, it being the intention of the gentlemen above named to complete the road within one year from this date, if possible.

"Secondly. The parties also offer to pay the arrearages of interest on the first and second mortgage bonds, and also all interest that accrues upon the same, until the road is opened its entire length, and also to settle the floating debt of the Company as well as the balances unpaid to contractors.

"They propose that the Company shall at once create a new mortgage upon all the property, rights, and franchises, of the Company, to be a second mortgage to secure bonds for \$4,500,000, of which bonds shall be used in exchange for the present secured mortgage bonds of the Company, and they shall also create a third mortgage for the purpose of securing \$3,450,000 of bonds to be called Income Bonds. The bonds to be issued under this plan to be payable in from twenty to twenty-five years, to bear seven per cent.

interest, payable semi-annually, principle and interest to be payable in the city of New York, and to be further secured by a reasonable pledge of the income of the road in the ordinary form. Bonds to an extent necessary to exchange for those secured by the present second mortgage, to be issued from time to time in exchange, and the balance of the bonds to be delivered to the gentlemen above named, as the work progresses, or as they shall adjust claims against the Company."

This proposition was accepted, substantially, by all parties interested; and on the 10th of May 1856, a contract was made by the Company with W. S. Aspinwall and his associates for the completion of the road.

THE CONTRACT.

This contract is in substance as follows:

1. The Ohio and Mississippi Railroad Co. agreed to relinquish to Messrs. Aspinwall and associates, the possession of all their road constructed, or to be constructed under the agreement, together with all the property of the Company, real and personal, "and all the tolls, income, issue and profits thereof," "and the right to use the road and its appendages, and said machinery; and also the property known as the 'WHARF PROPERTY,' leased from the city of Cincinnati to the Company, from this time forth until the first day of November, 1857, and until said road is finished and surrendered to the Company as hereinafter provided—the Company reserving all their chartered rights to manage said line of road during the time aforesaid."

2. The O. & M. R. R. Co. agreed to sell and convey to Messrs. Aspinwall & Co., all the real estate of the Company not included in the above section 1.

3. The said Company agreed to assign and transfer to the associates "all the assets of the Company of every kind."

4. The Company agreed to issue bonds in proper form to the extent of \$4,500,000, payable on the 1st March, 1876, with interest at seven per cent. semi-annually in New York, secured by mortgage upon the property of the Company, to be called "Mortgage to secure Construction Bonds." The said bonds to be exchanged to an extent necessary for that purpose, for the bonds now secured by the second mortgage upon said road, and the balance of the bonds to be delivered to said Aspinwall and his associates as the work hereafter specified, progresses.

5. The Company also agreed to issue on request "Income Bonds" in proper form, to the amount of Three Millions Four Hundred and Fifty Thousand Dollars, payable on the first day of May, 1881, with interest at the rate of seven per cent. per annum, payable semi-annually, principal and interest in New York, and secure the same by a mortgage upon said Road in due form, and by a pledge of the net income of the Road, which bonds are to be delivered to said Aspinwall and his said associates as the work progresses, or they adjust claims against the Company.

6. The said Aspinwall, Alsop, Chauncey, Comstock, Leavitt, Gould, Hoadly, and their associates, in consideration of said covenants and of the performance of the same, on the part of the said Company, covenanted that they would at their own costs and charges, construct, make and finish, and put in good and complete running order, according to the plans of S. S. Post, Esq., Engineer, before the reduction made by him in June, 1855, the

Railroad of said Company from Mill street, Cincinnati, to Vincennes, with the necessary and proper depots, water stations, machine, and other shops, sidings and turn-outs, cattle guards, road and farm crossings, and equip said road with sufficient furniture and equipments, and of a quality fit and adapted to the said road. The work to be proceeded as vigorously as circumstances will permit, and completed, if possible, within one year; and said Aspinwall and his associates above named, covenant to deliver up and surrender said road, depots, stations, shops and offices, and all its equipments, in good and complete order, to the Company, on its completion.

7. The said Aspinwall and his associates above named, further covenant to settle the floating debt of the Company, and the arrearages of interest on the first and present second mortgage bonds of the Company and also all interest that accrues upon the same until the road is opened its entire length, and the unpaid balances, including the retained percentage to contractors so far as the Company is liable for the same by the redemption with income bonds at par, of the scrip certificates to be issued by the Company, as provided in the proposition of the 23d January, 1856, to the creditors, which certificates are to bear interest at seven per cent., and to be payable three years after their issue, in the income bonds of the Company at par, in sums not less than \$500, and to be redeemable at any time after the completion of the road, and before their maturity, in the said income bonds at par, upon the surrender of said certificates, in sums of not less than five hundred dollars as aforesaid.

In case any creditor of said Company shall refuse to accept payment of his claim in said income bonds, then an amount of income bonds at par sufficient to pay such creditors shall be returned to the Company, and be cancelled upon the surrender of this contract.

8. Aspinwall and his said associates, covenant that on the 1st day of November, 1857, or when they surrender the said road to the Company, they will re-assign the contract between the Company and the Cincinnati & Indianapolis Railroad Company, to the O. & M. R. R. Co., and in the meantime the Ohio & Miss. Railroad Company may retain the right to notify the Cincinnati & Indianapolis Railroad Co., of any changes, it may, in the opinion of the O. & M. R. R. Co., be proper to make in said contract in accordance with the terms thereof, and the Company shall have the right with the assent of said Aspinwall and his associates, to change or modify or wholly annul said contract, or any other existing contract, notwithstanding the assignment of the receipts and profits arising from said contract to Aspinwall and others.

THE REPORT.

The Committee, after examining the above and other papers connected therewith, in order to determine the actual liability of the respective parties to the contract of May 10th, 1856, unanimously adopted the following, as the basis of investigation:

No. 1. It is agreed that the Associates are bound under this contract, at their own cost and charges, to construct, make, and finish, and put in good and complete running order, the section of the road, from Seymour to Vincennes, according to the original plans of S. S. Post, Esq., Engineer, before the reduction made by him in June, 1855.

No. 2. It is agreed that the Associates are bound under their contract to finish any unfinished work, accord-

ing to the original plans in the section extending from foot of Mill street in Cincinnati, to Seymour.

No. 3. It is agreed that the Associates are bound under their contract, to furnish all the necessary and proper depots, water stations, machine and other shops, sidings and turnouts, cattle guards, road and farm crossings, from foot of Mill street, in Cincinnati, to Vincennes.

No. 4. It is agreed that the Associates are bound under their contract, to equip the road with sufficient furniture and equipment, and of a quality fit and adapted to railroads.

No. 5. It is agreed that the Associates are bound by their contract to surrender to the Company, the road in complete running order, and to deliver up and surrender the depots, stations, shops and offices and all its equipments in good and complete order.

No. 6. It is agreed that the Associates are bound by their contract, to pay the arrearages of interest on the first and second Mortgage Bonds, and also all interest that accrues upon the same until the road is opened its entire length, and to settle the floating debt, and all other claims against the Company, so far as the same could be done in income bonds at par, and that they are bound to return to the Company an amount of income bonds equivalent, at par, to the unsettled floating debt and demands.

In view of the above, the committee made up their report under the following heads:

1. Plans of construction employed on the division extending from Seymour to Vincennes.
2. Manner in which those plans were executed
3. Construction on the division extending from the foot of Mill street to Seymour, sidings, turn outs, etc.
4. Structures, such as depots, water stations, etc., from Mill street to Vincennes.
5. Rolling Stock.
6. Surrender of the Road.
7. Payment of the Floating Debt and Interest.
8. Receipts and Expenditures.

I. SEYMOUR TO VINCENNES.

After examining in detail the construction and work on the division between Seymour and Vincennes, embraced in one and two, the committee found that the work was constructed "according to the original plans under the Seymour contract," with some slight variations, and that the bridge foundations, the masonry, the bridges erected and the superstructure, embracing iron, ties, chairs, spikes, etc., are in accordance with the original plans.

II. EXECUTION OF THE WORK.

After getting all the information to be had on the subject from Superintendent Clements and others in regard to the manner in which the work was executed, the committee were satisfied that the work on the main track, on the Division from Seymour to Vincennes, so far as finished, has been executed by the Associates in a faithful and substantial manner, and in accordance with the original plans.

At the same time they find that on the 15th April, 1857, the period when the Associates claim to have completed their contract, there remained a large amount of unfinished work, such as widening fills, opening cuts, surfacing up track, which should have been executed by the Associates, which has since been mostly done, but paid for by the Company out of the earnings of the road during the past year.

III. MILL ST. AND SEYMOUR DIVISION.

The committee were of opinion that the wording of the contract made it the duty of the Associates "to restore this division of the road to its original condition, when completed under the Seymour contract. In case any buildings had been destroyed by fire, or any portion of the road swept away by flood, we

entertain the opinion that under the contract, the Associates would be bound to restore the same to its original condition. So in case the track, or embankments, or cuts, were deteriorated so as not to be in good and complete running order, they hold that the contract requires the Associates not only to put the entire line in good and complete running order, but that this shall be the character of the work when turned over to the Company."

In this connection the committee say:

We regret to find that this interpretation of the contract by the committee, and which to us appears to be the plain deduction from the language of the contract, is radically different from that adopted by Col. Talcott, the Chief Engineer of the Co. We find the following language held by this officer in a letter dated October 23, 1857: "In the settlement of the account of the Associates with the Company, the former should have a credit for all construction work East of Seymour." "The construction East of Seymour to include all buildings and improvement of buildings, new track switches and frogs at depots and sidings." It would thus appear that the Chief Engineer does not regard the Associates as bound for any work in the division East of Seymour, and every expenditure for repairs of track, for surfacing up, for widening track, for sidings and turn outs, for depots, and other buildings, has been charged, by order of the Chief Engineer, to the account of the Company.

We find that this interpretation of Col. Talcott runs through almost every item embraced in this contract. Thus we find him charging to the Company a large sum for repairs of the Rolling Stock received by the Associates from the Company. He also entertains the opinion that the Associates are only bound to furnish the siding and turnouts required under the Seymour contract, on the division west of Seymour, while on the division east of Seymour he charges, as extra, all extension of the old sidings, and all construction of new sidings. The same remarks are applicable to all the structures on these two divisions, such as depots, water stations, etc.

But the contract obligates the Associates not only to finish the road from Mill street to Vincennes, as above, but also to finish it with "the necessary and proper depots, water stations, machine and other shops, sidings and turnouts, cattle guards, road and farm crossings, and to equip said road with sufficient furniture and equipment."

If this language is to be interpreted according to its plain purport, it would seem that the Associates are not only bound to bring the condition of the road up to what it was, at the completion of the Seymour contract on the Eastern Division, but also in case there was any deficiency on this Division in "necessary and proper depots, sidings, turnouts, etc.," these must be supplied.

We are of the opinion that the interpretation of the contract, as given by the Chief Engineer, has been productive of the most serious consequences, both to the Associates and to the Company. From it sprang the idea that even on the 15th April, 1857, the contractors had already done more construction work than was required under the contract; while at that time a large number of sidings and turnouts a large number of de-

pots and water stations, along the entire line from Cincinnati to Vincennes, remained to be constructed, and while we also find that large sums were subsequently expended for surfacing up the track, which in case the road had at that time been put in good and complete order, could scarcely have been required. This interpretation of Col. Talcott was also the basis of the resolution of Mr. Barlow, adopted by the Board on the 29th of July, 1857, accepting the road as finished on the 15th April, 1857, which resolutions have given rise to much of the unpleasant feeling which has of late become so prevalent among the Stockholders, and given color to the charge that the Associates were anxious to escape some of the just responsibilities of their contract.

After some further discussion of the interpretation of this part of the contract, the committee state:

With regard to the condition of the road from Cincinnati to Seymour on the 15th April, 1857. The committee have found the greatest difficulty in forming an opinion, that is entirely satisfactory to themselves, from the fact that it is almost impossible to determine such condition from a past date, and also because our information upon the subject is necessarily meagre, consisting as it does solely of the opinions of others, the best light, however, that they can procure, the committee incline to adopt the statements of Mr. Clements, that at the date when he took charge of the road (about June 1,) the same was in good running order, so far at least as the main track was concerned, but that it was in the condition of a complete and permanent road, is a proposition which the committee can not reconcile with the fact of the very large amount of money charged to extraordinary repairs during the year 1857.

The committee then inquire into the condition of the structures, side tracks, etc., on the whole line before and after the 15th of April, 1857, which they close with the following remarks:

In view of the foregoing considerations, the committee find that on the 15th April, 1857, there was a large deficiency in sidings, turnouts, water stations, passenger and freight depots, etc., along the entire line, which the Associates were required by their contract to furnish, part of which have since been built at the expense of the Company, and a large number of which still remain to be furnished, and that therefore the line from Cincinnati to Vincennes was not, in our opinion, in this respect, at that date, nor indeed at any day between that and the present, in good and complete order, as required by the contract.

In support of this view, they give the following—

LETTER OF W. H. CLEMENT, ESQ., GEN. SUPT.
CINCINNATI, July 8, 1858.

SAMUEL B. KEYS, ESQ.,
Dear Sir:—Your favor of the 7th is before me. The attempt to answer your interrogatories in detail would require more time than would suit your convenience to wait, or that I have leisure to devote to the subject just now, and I will therefore confine myself to a general statement for reply. We need buildings for passenger and freight use at Lawrenceburg, Delaware, Hardenbergh, Huron, Shoals, and Washington; and for freight use at Aurora, Mitchell, Wheatland, and the Crossings of the Evansville and Crawfordsville Railroad. The frame of a station house is up at Aurora, and arrangements have been made for a warehouse at crossings of E. and C. Railroad.

We need additional side track at Aurora, North Vernon, Seymour, Mitchell, Shoals, and Vincennes, and a number of the side tracks require extending and com-

pleting. This work is being done as rapidly as circumstances will permit. Since I took charge of the road June 1, 1857, side tracks have been put in at the depot grounds in Cincinnati, at the gravel pit, at sand pit near Seymour, at Seymour, at Bushy, at Georgia, at Huron, at the Shoals, at Belgrade, at Black Oak, at Washington, at Seven Mile, and at Vincennes, and some of the side tracks have been extended since that date. A station house has been purchased at Moore's Hill, and another at Osgood. A passenger station and engine house has been erected at Seymour. A passenger station at Mitchell, water stations at Poson, Scottville, near Loogootee, and five miles east of Vincennes. The stations have been completed at Fort Ritner and Loogootee, and a machine shop and engine room for ten engines at Vincennes. The machine shop at Vincennes needs an engine lathe, large enough to turn driving wheels, and some small tools.

The buildings at Cincinnati and Vincennes answer our present needs. At the time I took charge, the road from Cincinnati to Seymour, was in good running order for an unballasted road, which had been in use four years.

Very respectfully,
W. H. CLEMENT,
General Supt.

It is proper to state that the cost of all the sidings and structures built since April 15th, 1857, has been met by the Company.

To the list of depots above given by Mr. Clement as still required by the Company, we would add that passenger and freight depots are required at the City of Cincinnati. The present structure was only intended for temporary use, and is not of a character to constitute the proper depots for this point, contemplated by the contract with the Associates.

IV. THE ROLLING STOCK.

The requisition for the necessary amount of rolling stock was drawn up by the Chief Engineer, after consultation with the Superintendent of the road, and embraces the following item:

33 locomotives, 32 passenger, 12 baggage, mail and express, 416 freight cars, 40 four-wheel gravel, 40 hand truck, and 20 hand crank cars.

This requisition contemplated all the machinery to be in good and complete running order. Of the items in the foregoing, the following were owned by the Company prior to the execution of the contract with the Associates: twenty-one (21) engines, 18 passenger cars, 6 express cars, 52 box cars, 98 flat cars.

From the experience of the present Superintendent, the committee is satisfied that the machinery required by the Engineer, if all in good and complete order, would have been sufficient to open the road and answer its immediate wants.

Had the business of the road so increased as to have answered the expectations of its friends, a much larger amount would soon have been required. For by the report of Mr. Barlow to the Stockholders, in July, 1857, he stated that the rapidly increasing business would soon require a large addition to the equipment. It will be seen from the report of Col. Talcott, under date of Nov. 11, 1857, that the machinery held by the Company, prior to May 11, 1856, was at that time in very bad condition, and required extensive repairs; and he accordingly charges the Company with a large amount as an extra, being the cost of keeping this machinery in repair over what would have been required had it been in good condition. We are also informed by the Superintendent, that a large sum has been expended since April, 1857, in repairing this old machinery. The committee are, therefore, satisfied that on the 15th of April, 1857, the old machinery of the Company was not in the condition required by the contract with the Associates, and they would

suggest, that in view of the character of this old machinery, and the time it had been in use, a larger equipment would be required than would be required if all the machinery were now as contemplated in the requisition of the Chief Engineer, and that a critical examination should be made of all the machinery to ascertain what part of it was in complete order, and what amount would, in view of the condition of the old machinery, be sufficient. It will be seen that the Associates have furnished a much larger amount of equipment than called for by the requisition of Col. Talcott, but they claim to charge the Company for the amount furnished, over and above the requisition. We have already stated our views of what would be sufficient. Whatever amount the Associates have furnished over and above this amount, of course is a matter of equitable adjustment between them and the Company. If it is necessary, from any circumstances, that it should be owned by the Company, of course a proper allowance will be made for it, but if not absolutely demanded it is of questionable policy for the Company to embarrass itself further by obligations which it is not in a condition to meet.

SURRENDER OF THE ROAD.

The road was formally surrendered to the Company, and accepted by it on the 29th July, 1857, as appears by the proceedings of the Directors—who were elected by the Associates. The following is record:

WHEREAS: Col. Talcott, Chief Engineer of this Company, has this day presented two reports on the subject of the completion of this road under the contract of William H. Aspinwall and others with this Company, which said reports have been accepted and placed on file by order of the Board.

AND, WHEREAS: By the said report it is decided that the road was completed in accordance with said contract of May, 1856, except in some unimportant particulars, as will appear by said reports, and it is further determined by the same reports that the proper amount of furniture, rolling stock, and equipment required to be placed on the road and surrendered to it, is as follows:

33 Locomotive Engines.
32 Passenger Cars.
12 Mail and Baggage Cars.
416 Box, Platform and Cattle Cars, (the number of each to be designated by the Superintendent.)
40 four wheel Gravel Cars.
40 Hand Truck Cars.
20 Do Crank Cars.

Therefore be it Resolved, That the said contract of the 10th day of May, 1856, between Wm. H. Aspinwall and others, and this Company, has been fully complied with by the said contractors, so far as regards the completion of the road, in accordance with said contract, and that the said contract is hereby declared to have been fully complied with on the 15th day of April last, and that the road is accepted by the Company as of that date, it being understood that this acceptance shall in no way interfere with any rights of the City of Cincinnati, under the aforesaid contract.

And be it further Resolved, That the said contract shall be deemed to be complied with by the contractors so far as the rolling stock, furniture and equipment of the road is concerned, upon the delivery and assignment by them to the Company of a sufficient number of cars to make those upon this division equal in number, and of the description reported by the Chief Engineer to be sufficient as aforesaid, and that upon the delivery of the said cars and engines, as aforesaid, the said contractors be released from all further obligations and liability under the said contract.

Be it further Resolved, That the Chief Engineer be directed to examine and report to this Board the stated value of the work still unperformed by the said contractors as per his Report of this date, and also the value of all work performed by them beyond the requirements of their contract, and that any difference between the sums thus reported, be adjusted by the officers of this Company.

This is certainly a most extraordinary proceeding, in which the parties in interest act as their own judge and jury, and decide the case to suit themselves. To this, however, the committee object as follows:

The question here arises, is it possible to go behind the resolutions of the Board just

reported? The committee are unanimous in their views, and have decided that it is their duty to examine this matter, without regard to this seeming absolute decision of the question for the following reasons:

1. By the terms of the contract with the Associates a sufficient amount of Stock was placed in the hands of three Trustees for their benefit to enable them to elect the Board and all officers.

2. In the exercise of this power, the Board which acted on the 29th of July, 1857, had been elected by the Trustees holding the Stock for the benefit of the Associates.

3. The Chief Engineer, Col. Talcott, had also been elected by a Board brought into power by the same Trustees.

It is proper here to add, up to July 29, 1857, the Road had been in the possession of the Associates, and operated by them. And it was not until the month of September that the clerks in the office began to separate the accounts, and open books for the Company.

In obedience to the third of said resolutions, an estimate was made on the 25th of November, 1857, on the unfinished work of construction on the division west of Seymour at that time, and it was estimated that \$14,000 would acquit the Associates of all demands under the contract for unfinished work on the road bed, and sidings, and this sum was accordingly credited by the Associates to the Company.

After discussing the different constructions of the contract by Col. Talcott and themselves, the committee propose the following as a basis of settlement:

For this purpose, if we assume any day, the 4th of May, for example, as the point of departure in this settlement, and if the amount of work remaining to be done under the contract should be fully and fairly estimated, as well as the extra work at any time performed by the Associates, the difference in these two amounts would devolve as a debit on one or other of the parties. In case the contractor should be the deficient party, then it would be proper to take into consideration not only the cash cost of the work remaining to be done, but the additional fact that the Associates received nominally a much larger sum in Bonds than at par would pay for the work to be done, and some equitable arrangement should be made whereby there should be returned to the Company some just and fair amount in Bonds, as an equivalent for the work the contractors have failed to perform.

In case it shall be found that the Road sustained a loss in its business, from the want of proper sidings, turn-outs, depots, etc., such loss should be fairly compensated for by the Associates in their settlement with the Company.

Again—In case it shall be found that the Road was not finished, and could not have been properly opened by the Company on the 4th of May, 1857, (our point of departure) for business of all kinds, then it would be unfair to release the Associates from the payment of interest on the Bonds from that date; and they should be compelled to pay this interest up to the date at which the Road could have been prepared to do all the business usual on such a road.

We think we have thus suggested a basis for settlement equitable to all interested, the details of which we are willing to leave to the proper parties. In conclusion, we are not informed in any way that the surrender of the road to the Company has ever been made in exact accordance with the demands of the contract. This matter must, of course, claim the early attention of the Board.

V. FLOATING DEBT.

In regard to the Floating Debt, the committee were clearly of opinion that the Associates are bound by their contract to settle the floating debt and all other liabilities of the Company so far as the same could be done with Income Bonds at par, and that they are bound to return to the Company an amount of Income Bonds equivalent at par to the unsettled floating debt and demands. Of the old debt there is still outstanding about \$130,000.

VI. RECEIPTS AND EXPENDITURES.

Under this head the committee say:

In presenting the subject embraced under the head of Receipts and Expenditures, the committee find themselves surrounded by great embarrassments. These arise from this fact, that under the interpretation of the contract by the Chief Engineer, the road was never brought into that condition which the committee believe is demanded by the terms of the contract. We find, moreover, that from the same cause large sums of money have been expended, especially on the Eastern Division of the road, and charged to the company which, in our opinion, should be paid by the Associates. We are aware of the importance of presenting to the stockholders some statement which may enable them to form a just opinion of the value of their property. Had the road been finished, furnished, and equipped in every respect in accordance with our views of the terms of the contract, say on the 4th day of May, 1857, then a comparison between the actual receipts and expenditures in the business of the year ending May 4, 1858, would have exhibited the capacity of the road to earn money during a year of extraordinary depression in business.

The receipts and disbursement for the year are thus given in gross. We have no room for the details. It will be seen that nearly half the expenses (\$407,550) were for repairs and materials, which seems an extraordinary sum to expend on a "finished" road, just from the hands of the contractors!

RECEIPTS.		
Gross earnings for the year....		\$776,916 19
LESS.		
Balances in the hands of agents and foreign roads, and mail money to be paid in regular course.....	\$43,167 76	
Due from Western Division....	58,436 15	101,603 91
		\$675,312 28
DISBURSEMENTS.		
Amount of operating expenses and repairs of Eastern Division to May 1, 1858.....	\$468,331 37	
Interest, running account....	5,962 34	
Materials and extraordinary repairs.....	407,549 60	
Real Estate.....	13,323 85	
	\$995,367 16	
LESS.		
For liabilities, supplies, and business of the road.....	\$134,119 55	
Due on Pay rolls.....	59,851 06	
Due for materials and stock claims.....	26,084 27	\$675,312 28

The committee, after examining in detail the expenditures, say:

It was now found, by the examination of the above exhibits, that large amounts appear to have been appropriated to the payment of extra claims allowed by Col. Talcott, and also materials furnished and charged to the Com-

pany, beyond the amounts actually required in the economical working of the road. *

* * * The committee can then only say, in conclusion, that in the disbursements already reported, it will be found that a very large amount paid by the company for the construction, for iron, for repairs of machinery, for depots and other buildings, for surfacing up track, for sidings and turnouts, will be fairly chargeable to the Associates in case our interpretation of the contract shall be finally accepted as just and equitable.

Whatever this sum may amount to in case it had been charged properly in the outset, and had been paid by the Associates, an equal amount would have remained in the hands of the company, and by so much would the current expenses for the year have been reduced.

After giving a monthly statement of the gross earnings for the year, the committee thus close their report:

In case no interruption of business had occurred, a largely increased receipt could have been fairly expected for the remaining months of the year 1857, and for one or two months in the year 1858.

Admitting the average receipts on this hypothesis to have been equal to the amount received in September, 1857, the gross receipts (or earnings) for the year would have reached \$1,100,000. With a road in good and complete order, with new machinery, with depots and other buildings new and in good order, we are of opinion that the road might have been operated for 55 per cent., or \$605,000. This would leave a net income of \$495,000, an amount more than sufficient to pay the interest on the First Mortgage and Construction Bonds. Such a result we presume would have been highly satisfactory to all the parties interested in the road. We are of the opinion that the road was capable, under judicious management, and with the average commercial prosperity of the country of reaching the foregoing result at the close of its first business year.

If this conclusion be just, there is every reason to induce those interested to harmonize in their action, to refer all matters in dispute to just, intelligent, and honest arbitrators, and to combine heartily and earnestly in the prosecution of such plan as may be regarded best calculated to advance the interests of the bond and stockholders, and to develop, to the highest possible degree, the capabilities of a road three hundred and forty miles in length in its two divisions, traversing a region of wonderful productiveness, and uniting the two great cities of the Mississippi Valley.

In concluding their report the committee recommend the adoption of the following resolutions:

1. Resolved, That the Stockholders are willing to unite with the Associates in the execution of any equitable plan which may speedily adjust all matters now in dispute between themselves and the Associates.
2. Resolved, That a committee of five Stockholders be appointed by this meeting, with full authority to bind the Stockholders in any plan of settlement which may be adopted by the committee and the Associates.
3. Resolved, That this meeting recommend to such committee a reference of all matters in dispute to the decision of three Arbitrators; one to be selected by the committee, one by the Associates, and those two to select a third.

All of which is respectfully submitted.

O. M. MITCHELL,
J. D. LEHMER,
JOHN W. HERRON,
SAM'L B. KEYS,
THEW. D. WRIGHT.

Cincinnati, August 25, 1858.

This report, on motion of W. Hooper, Esq., was accepted, and then on motion of the same gentleman, it was, with the accompanying resolutions, adopted.

Judge Matthews moved that the Investigating Committee be authorized to act for the stockholders in carrying out the recommendations of said committee. Carried.

Judge Matthews then read the following preamble and resolution, adopted by the Directors of the Ohio and Mississippi Railroad Company, at a meeting held on the 8th of June, 1858:

WHEREAS, the President and late Board of Directors have recommended in their report to the annual meeting of stockholders that some plan of capitalizing the

obligations of the company be adopted, whereby it may be relieved from its embarrassments; and

Whereas, it is highly desirable that immediate measures be taken by all classes of interests to protect and establish the same—reasonable concessions being both politic and equitable, in which measures, it is the duty of the Directors publicly to concur, in order to save the road from otherwise inevitable disaster; therefore

Be it Resolved, That the Executive Committee be instructed to facilitate, in such manner as they shall deem expedient, the adoption of the plan of capitalization submitted by Mr. Learned, as the same now stands, or may be modified.

He followed this by offering the following resolution which was unanimously adopted:

Resolved, That the stockholders of this company now present, hereby concur in the recommendation of the Board of Directors, embraced in their resolution of June 8, 1858, in favor of capitalization of the various interests in the company, upon some just and equitable basis, to be approved and recommeded by the committee of five, appointed by the previous vote of this meeting.

Gen. O. M. Mitchell, then offered a resolution concurring with the committee in acquitting the associates of intentional departure from the terms of the contract, which, after several amendments and much debate, was lost, whereupon Gen. M. resigned his position upon the committee. This action of the Stockholders is to be regretted, as it places all parties in a hostile position, which will probably terminate in an expensive and needless litigation.

After the report was read, Mr. W. H. Clements, Vice President and Superintendent, presented, on behalf of the associates, a general protest "against the statements, inferences, and conclusions of the report, generally, and particularly wherein it directly or by imputation, charges upon us any material non-compliance with the contract; or upon the Engineer, Col. Tolcott, any material misapprehension or departure from its terms and intentions."

This protest concludes as follows:

The good faith with which we have performed (and in many instances largely exceed) our obligations to the Company, should be a sufficient answer to the imputations which the suggestions of the report, as to the performance and acceptance of the work, obviously involve.

From higher than pecuniary considerations, we can not consent to consider that action debatable. If, therefore, it shall be approved by the stockholders, there can then remain no issues between us and the company, except as to adjustment of accounts and demands.

Without farther allusion to the report, it becomes us in this connection to say:

That up to this date; our demands and accounts against the Company for final settlement, have not even been presented.

That we shall not intentionally demand one dollar which we shall not consider equitably our due.

That we have appointed a Committee, with full authority on our part, to effect a full and final settlement with the Company.

That the Directors on the part of the Company have likewise appointed a Committee for the same purpose, no member of which has any interest in the contract.

We have no doubt that an equitable adjustment will be agreed upon by the Committee, but should the meeting of stockholders think otherwise, and desire to appoint and authorize

an additional Committee from their number, we should not apprehend difficulty therefrom, and therefore will interpose no objections, merely reserving all our legal rights and positions as they now are.

Respectfully, &c.,

W. H. ASPINWALL,
SAM'L W. COMSTOCK,
EDWIN BARTLETT,
DAVID HOADLEY,
HENRY CHAUNCEY,
EDWARD LEARNED.

In behalf of W. H. Aspinwall and other contractors.

SOUTHERN PACIFIC R. R.

We copy from the Cincinnati Gazette the proceeding of the meeting of the stockholders of the Southern Pacific Railroad Company, held at the Merchants' Exchange, Monday afternoon, to hear a report from the President, Dr. Fowlkes, of Memphis, with reference to the condition and prospects of the enterprise.

The meeting was a small one, owing, doubtless, to the fact that shareholders have become discouraged of late, but the exhibit made by Dr. Fowlkes served to encourage those who heard him. The statements made were, in the main, the same as those submitted to a meeting at Louisville, the substance of which we have already published. The condition of the company at the present time may be stated briefly as follows: The past management has been reckless in the extreme. *Eighty thousand dollars a year* was paid in the shape of salaries, for keeping up offices at New York and New Orleans, while in the six years only twenty-five miles of the road have been built. The deed of Trust sale is regarded as void, and the new company formed under that sale as illegal. Indeed this new organization is not supposed to stand in the way of a settlement. It is rapidly dissolving in Texas, and a dispatch from Memphis, dated Saturday evening, reports cheering news from Marshall. The members of the new company, with one exception, are in favor of a compromise, and a sufficient amount of funds to pay the pressing debts, would save the property. The debts of the company amounts to about \$465,000. For these judgments may be obtained from the court, which met at Marshall yesterday, and if obtained, the property could be sold early in November. Under a law of Texas, the road bed, rolling stock, and franchise of a railroad are considered as a whole, and can not be sold separately. A sale of the road under an execution, would therefore take it entirely out of the hands of stockholders, and the purchasers would become the company, in fact, and be entitled to all its rights and privileges. For \$200,000 all the debts of the company may be satisfactorily arranged, and the assets, amounting to over two million dollars, released. If this should be accomplished, the old company can go ahead with the work. The stockholders are asked, in order to meet this requirement, to contribute fifty cents per share. If this sum can not be realized in the way proposed, the road must be sold, and stockholders will be cut off entirely. Dr. Fowlkes is willing to work with the stockholders, if they show a disposition to work for themselves, but he can not afford to lose his interest, which is very large. If,

therefore, the proposed arrangement can not be made, he will unite with other parties, raise the money that is required, and purchase the road under the executions that are about to be issued. The stock is now in jeopardy. Upon the completion of twenty-five miles more of the road, making fifty miles altogether, it would be worth 85 per cent. on the amount paid in. The nominal value of the stock issued, is \$60,000,000. Upon this \$3,000,000 has been paid. Dr. Fowlkes does not believe that any fraudulent stock has been issued, but a great deal has passed out for trifling considerations. Some of this must be clipped off. The stock sold at New Orleans, for default in payment of instalments, may be redeemed if applied for any time before the settlement of present difficulties, but not afterward.

The lands granted to this company by the State of Texas will be worth, when the road is completed, \$120,000,000. The whole cost of the road is estimated at \$20,000,000.

At the close of Dr. Fowlkes' remarks, Messrs. Wrightson, Reeder, Westcott, Johnson, and Bagley were appointed a committee to examine matters, and report to an adjourned meeting, to be held at the Merchants' Exchange, this afternoon at 3½ o'clock.

We were favorably impressed with Dr. Fowlkes. He is we think a straightforward, honest man, and much confidence is to be placed in his statements. According to the exhibits made by him, there is some hope for stockholders. The latter, if they desire to save their investments, should move promptly in the matter. The stockholders at Louisville are manifesting a good deal of interest just now.

SECOND DAY.

At an adjourned meeting of the stockholders of the Southern Pacific Railroad, held pursuant to adjournment in the Merchant's Exchange, at half past three o'clock, on Tuesday, August 31, 1858, James F. Conwell, Esq., in the chair, the committee appointed at the previous meeting made the following

REPORT:

Whereas, At a meeting of the stockholders of the Southern Pacific R. R., residents of Cincinnati, and vicinity, convened at the Merchant's Exchange, on Monday, the 20th inst., for the purpose of hearing the report of Dr. Jephtha Fowlkes, the President of said road, concerning its present condition and embarrassments, and believing it to be an enterprise that on it not to be abandoned on account of its present indebtedness, and previous mismanagement.

And whereas, It is the opinion of the stockholders, sustained by the best legal advice of the country, that the sale under the deed of trust, is a gross fraud, and illegal, and can not be sustained.

And whereas, The recent action of the State authorities to deprive the Company of its charter and franchises, on a mere technicality which is based on a mistaken construction of the law of Feb. 7, 1853, requiring reports from railroad companies, can not and will not be so construed as to work injury to the Company, by the great State of Texas, as to do so would destroy confidence of capitalists in her legislation and good faith, thus destroying all of her railroad enterprises.

And Whereas, We have full confidence in the great enterprise in which we are engaged, that we have no doubt that it must eventually be carried to triumphant completion, either by the present stockholders, or some other more energetic or successful parties.

And Whereas, By honest management in the future, the charter and franchises of the Company are worth millions beyond present outlays, securing to the stockholders a profitable investment in the stock, be it therefore,

Resolved, 1st. That we recommend to the stockholders still delinquent in their instalments now due up on their stock, to pay the same promptly.

2d. That also we recommend a loan on the five per cent. stock of fifty cents on the share, to be placed in the hands of some one person, in trust to be paid only to the creditors of the Company, on the final arrangement of a compromise with the same, whereby the said stockholders will be fully protected in their rights, and that a committee of three be now appointed, who shall be duly authorized to select a trustee, into whose hands said money shall be paid, and who shall have full author-

The accounts of this Company show that a dividend of 3-4 per cent. per annum could have been paid, leaving a small balance over; but the Directors have decided on re-consideration, that no dividend be declared at the half-yearly meeting, and that the balance of £37,000 be carried over to the next half year.

CINCINNATI, Sept. 1, 1858.

T. WRIGHTSON, Esq.—Sir:—Having at an early day taken considerable interest in the affairs of the Southern Pacific Railroad Company as a stockholder, and its agent, I am somewhat familiar with, and identified with its history, hence, feel warranted in endeavoring to resuscitate the project from its unnecessary prostration from dishonest and bad management. Intrinsically the project is one of the best of this Country, having the best route to the Pacific, with a charter unequalled, and well worth preserving to its legitimate owners. Notwithstanding its sacrifices, though large, are comparatively small to the advantages yet to be secured; its lands, on completion of the road being worth millions more than the cost of the road, conditioned hereafter it be honestly and faithfully managed. It is well known to those familiar with the management of the Company, that near two years since I sought to avoid the present position of the company by remonstrating and protesting against the dishonest and bad management developing itself, setting forth to the directors that if they persisted in disregarding the official documents of the Company, in which they were legally and morally committed to a well defined and sound policy, which to that time had saved the charter and removed the "moonshine," they must suffer disgrace and the Company be prostrated—such proved too true. The time has now come to make amends for the past by promptly securing the remaining advantages, and avoiding previous errors. Hence, I can recommend to the attention of all interested the resolutions in Gazette of this day. Some sixty millions of stock have been issued, at a cost when all paid up of near three millions. Some near three hundred thousand dollars is due, which, if promptly paid, will save the charter and its rights to the stockholders, otherwise they must be sacrificed. To accomplish which I certainly must recommend that stockholders *immediately* pay to Messrs. W. & H. Burkhardt of Louisville, Ky., all past due installments on stock, and promptly loan the Cincinnati Convention fifty cents per share on all the stock they hold, instructing the committee to use it in protecting their interests properly secured, and furnishing them with their proxies whereby to secure such changes in the directory as shall inspire confidence in their honesty, capacity, and efficiency. Having been instrumental in many becoming stockholders, I feel desirous of their availing themselves of the opportunity which now presents itself of saving their investment.

To complete the road 800 miles, it will probably cost, all told, under good management, forty millions of dollars, the lands will bring at least that, at five dollars per acre. Present cost, say three millions and probably two millions more from sales stock, making a cost to stockholders of five millions, and the stock eventually reduced to that amount, for a road costing forty millions, located free from competition from rivers and in a productive country, stockholders must see they have it in their power of making their investment finally profit-

able provided they promptly act in furnishing the committee with means and authority to secure honest and capable managers in the place of those who have brought ruin and disgrace on the Company and themselves.

Very Respectfully,
EDGAR CONKLING.

BURNET HOUSE, Cincinnati, Sept. 1, 1858.

T. WRIGHTSON, Esq., Sec. Stockholders Meeting:—DEAR SIR:—In reply to your enquiries, I state that *all* Stockholders who pay up installments, or may loan the recommended advances Stockholders, of 50cts. per share, by your committee, will be protected to the extent of such advances and payments to the Company. None need fear to pay up, notwithstanding the *secret and slanderous* letters of the late officers and agents of the old Company,—who are the purchasers under the *fraudulent and void* Deed of Trust,—made to appropriate the property of those who entrusted it to their control only. *All paying stockholders shall be equally protected with myself*; this you can assure all stockholders of this Company, wherever they reside. I find here the present instruments of this "new Company," to be the former plunderers of "the old," who no longer indulge the hope of ability of making spoliations; they have now entered into the service of those who now claim to own, *what was only committed to them as a trust!*

Our New York Stockholders are meeting rightly this exigency. So I am advised by the agent sent to confer with them; they are proposing to advance the call in money, or to surrender half of their stock! This is honorable to them, and just to stockholders who pay up; no technicality will be resorted to, depriving the Stockholders of their stock—it being the sincere desire of the President and Directors to protect and preserve the rights of Shareholders. While this be true, yet duty to paying Stockholders and the Company will enforce the firm and inflexible rule, of requiring payment of all whose installments be still unpaid. And further, the demands against the Company, must, in good faith, be provided for; until this be done, the work must remain suspended, under existing embarrassments. It is, therefore, urged as the duty, and the interest of every Stockholder, to pay up what may be due and unpaid.

My advices from Texas on the 13th August, state, that a just and reasonable compromise will be made by "new Company," on my return to Marshall, Texas. I have little doubt of this, since the "sober second thought" of agents and officers, who are in "new Company," forgetting for the time, the difference between "mine and thine."

I have full confidence in the early adjustment of existing difficulties; and I sincerely hope that our stockholders will secure to themselves, respectively their rights, and hereafter reap the fullest expectations, hitherto indulged, from this vast and stupendous enterprise.

Believe me, Very Respectfully,
JEPTIA FOWLKES,
President S. P. R. R. Company.

CENTRAL RAILROAD TICKETS.—Orders have been issued by the Central Road to conductors to reject all tickets over three days old, and passengers are notified that when they buy tickets it must be for a continuous trip. There is a question of law involved in this which we are incompetent to decide, though our impression is that a railroad ticket is a contract to carry the holder, not necessarily the purchaser, over so many miles of road, and the holder has the right of election when he will go.

Passengers are also warned not to purchase tickets to a point beyond that where they intend to stop—that is, if they want to go to Albany, they must pay \$6 for an Albany ticket, and not \$5. for one to New York. Under this order passengers start with the intention of going to New York, but often change their mind on reaching Albany. How the railroad folks are to ascertain the intentions of passengers has not yet transpired.—*Buffalo Com. Advertiser.*

The bridge over Blockhouse Run, near New Brighton, on P., Ft. W. and C. R. R., was burned down on Monday night last. The bridge, which was about sixty feet long, was entirely destroyed, and the fire is supposed to have been the work of an incendiary. A large force of hands were set to work immediately, and trains passed as usual on Wednesday.

MONETARY AND COMMERCIAL.

There has been an increased demand for money since our last issue, and while rates have not advanced, lenders are firmer than heretofore. There is still an abundance of capital to meet all the wants of trade, but paper not strictly first class meets with less favor.

The new Bank of the Ohio Valley commenced operations yesterday, and reduced the rate of Eastern Exchange to 38, some of the other houses checked at the same rate, but the ruling rate with most houses was one-half.

Relative to markets the Gazette says:

There was a firm feeling in the Flour market to-day, and superfine sold at \$4.75 a \$5.00. Wheat was also firmer, but prices were not higher. No change in corn. Oats were slightly easier. Provisions were firm with sales at 5½ cents, loose, for bulk shoulders, and 5½ cents, loose, for small lots do.; 6½ and 7½ for bacon shoulders and sides, and \$16 for mess pork.

The Agent sent to confer with the New York Stockholders of the Southern Pacific Railroad, in a private letter of August 30, says:

"I find the Stockholders here generally willing to either advance fifty cents per share, on their stock, or surrender to the Company one half of what they each own. They seem now to be convinced of the necessity of some such action; hence their willingness to comply."

The Burlington and Missouri River Railroad has been completed to Fairfield—fifty miles.

We subjoin our usual quotations from Hewson & Holmes:

Since the date of our last circular there has been more animation in the market for nearly all Railroad securities, and a fair amount of business has been done at improved prices for bonds and stocks which rank first class. In the First Mortgage Bonds of the Little Miami Company an advance has been established of 2 per cent., and in the Second Mortgage of the Cincinnati, Hamilton & Dayton Company, the price has reached 3 per cent. over that quoted in our last issue. More disposition is manifested, by capitalists and others, to invest in the securities of good roads; and we anticipate for the future an increased demand

with a corresponding increase in prices. All our through lines are doing a large business, and in some instances the demands upon them are greater than their rolling stock can supply.

We quote to-day Little Miami 6 per cent. bonds at 83; Ohio & Mississippi Second Mortgage Construction at 20; Covington & Lexington Second Mortgage 7 per cent. at 45, and the Third Mortgage of the same Co. at 30; Cin. Hamilton & Dayton Second Mortgage 7 per cent. at 75; and Indianapolis & Cincinnati Second Mortgage at same price.

In the shares of the Little Miami Co. sales are quoted at 77 to 78; Columbus & Xenia 75 to 76; Indianapolis & Cincinnati 36½; Fireman's Insurance Co. 117; and Farmers Bank, Ky. 118.

There has been an improved demand for money during the week; but the supply has been abundant, and although rates of interest are firmer, they are without increase.

The Exchange market has been very dull and prices irregular. We quote New York, Boston, Philadelphia, and Baltimore at ¼ to ⅜ and ½ prem.; New Orleans ½ dis. to ½ prem.; gold ¼ to ½ prem.

CINCINNATI STOCK SALES,

AT THE STOCK BOARD,

MERCHANTS' EXCHANGE,
AND AT PRIVATE SALE

BY HEWSON AND HOLMES,

September 1, 1858.

BONDS.

\$17,000 Ohio & Mississippi R. R. Co., 7 per cent. 2d Mortgage Construction Bonds.....	20
\$6,000 Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	83
\$3,000 Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	45
\$10,000 Cov. & Lex. R. R. Co. 7 per cent. 3d Mort. Bonds.....	30
\$3,000 Cin., Ham. & Day. R. R. Co. 7 per cent. 2d Mort. Bonds.....	75
\$5,000 Indiana Cent. R. R. Co. 10 per cent. 2d Mort. Bonds.....	77
\$2,000 Col., Piqua & Indiana R. R. Co., Bonds guaranteed by Clev., Col. & Cincinnati R. R. Co.....	60
\$1,000 Indianapolis & Cin. R. R. Co. 7 per cent. 2d Mort. Bonds.....	75
\$1,500 Col. & Xenia R. R. Co. 7 per cent. Div'd Bonds, 1860.....	92½

STOCKS

112 Shares Little Miami R. R.....	77 to 78
50 " Columbus & Xenia.....	75 to 76
100 " Indianapolis & Cincinnati.....	36½
40 " Firemen's Insurance Co.....	117
15 " Farmer's Bank, Ky.....	118

McCALLUM, BRISTOL & CO., BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct McCallum's PATENT INFLEXIBLE ARCHED TRUSS BRIDGE, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 99 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 26.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, THEODORE DEHON, 40 Broadway, New York.

no13 10 Wal.

New York Metallic Car Spring Co.

MANUFACTURERS OF GARDNER'S CONICAL

VOLUTE STEEL CAR SPRINGS,

Office, 54 William St., New York.

Railroad Managers, Car and Engine Builders, and others interested in Railroad Machinery and Economy, are respectfully invited to notice the recent improvements in these Springs, and their application. Orders and correspondence solicited.

COURTLAND PALMER, Pres't.
CHARLES D. GIBSON, Treas'r.
RICHARD VORSE, Secretary.

SOUTHERN PACIFIC R. R.

NOTICE is hereby given that all stock in the above-named Company, on which no payment or only partial payment has been made, will be put up by the Company for sale for any deficit due thereon, on the 15th day of SEPTEMBER, A. D. 1858, at the principal office of the Company in Marshall, Harrison county, Texas. The amount due thereon may be paid to the proper officer of the Company, at Marshall, Texas, or at the office of the Company in New York within such time as to be reported to the principal office in Texas previous to this sale. This may save trouble, otherwise the sale must go on. It is hoped that by due payment no stockholder may sacrifice his rights to his detriment in this, the greatest enterprise in our country. All that is required is the deficit due on the requisition of the stock. This is particularly commended to the notice of subscribers in New Orleans. If the sale of stock does not produce the deficit due, each delinquent subscriber will be held responsible for the outstanding amount due.

au5

JEPHTHA FOWLKES, Pres., etc.

CHICAGO GREAT WESTERN AND NORTH-WESTERN ROUTE.

INDIANAPOLIS AND CINCINNATI

SHORT LINE RAILROAD



VIA LAWRENCEBURGH.

Distance 110 Miles and no Change of Cars between Cincinnati and Indianapolis.

THREE PASSENGER TRAINS!

Leave Cincinnati Daily (Sundays excepted), from the foot of Mill and Front Streets, as follows:

FIRST TRAIN, 6.15 A. M.

Chicago and Terre Haute Day Express, through to Indianapolis, Lafayette, and Chicago, without Change of Cars.

SECOND TRAIN, 2.00 P. M.

Accommodation: at the 2.00 P. M. Train arrives in Indianapolis at 9.30 P. M.

THIRD TRAIN, 6.00 P. M.

Chicago and Terre Haute Night Express. The 6 P. M. Train arrives at Indianapolis at 10.40 P. M. This train runs through from Cincinnati to Chicago with but one change of cars.

The above Trains make close connections at Indianapolis, Lafayette, and Chicago, with Trains for Terre Haute, Springfield, Rock Island, Galesburg, Kenosha, Lafayette, Jacksonville, Danville, Burlington, Milwaukee, Mattoon, Naples, Galena, Quincy, Prairie du Chien, St. Paul, Pana, Peoria, Dunleith, Racine, Decatur, Bloomington, La Salle and Waukegan; also, for Peru, Fort Wayne and Logansport; and all the Towns and Cities in the West.

Be sure you are in the Right Ticket Office before you purchase your Tickets, and ask for Tickets

VIA LAWRENCEBURGH.

Through Tickets good until used, may be had at the Union Offices, S. E. corner of Broadway and Front, where all necessary information can be had.

R. E. LEE, Ticket Agent.

Also, No. 2 Burnet House.

WM. M. STARK, Ticket Agent.

Office hours from 4 A. M. to 9 P. M.

to 9 P. M. H. C. LORD, President.

W. H. NOBLE, Gen'l Ticket Agent.

G. W. MORRILL.

G. B. BOWERS

MORRILL & BOWERS,

Successors to and members of the late firm of

C. WASON & CO.)

CLEVELAND, OHIO,

Are prepared to execute all orders for

Railroad Cars of Every Description.

WITH PROMPTNESS AND FIDELITY.

Having had long experience in the business, with Mr Wason, we feel warranted in saying to railroad men of the West that all work furnished by us shall be of the best quality in style, workmanship and material.

Orders respectfully solicited, with the assurance that no pains will be spared to give entire satisfaction in all cases.

W. G. HYNDMAN'S



Patent Portable Forge and Bellows.

THESE FORGES are superior to all others for builders of railroads, mines, quarries, gunsmiths, locksmiths, machine shops, boiler makers, gas fitters and mathematical and optical instrument makers. They are the only forge made that can be used without filling the fire bed with brick or clay. They are so constructed that the fire cannot injure the bellows, which is in the cylinder, under the fire bed. They can be put up in any desired position, and the smoke be conducted to the flue by a pipe.

Railroad companies and others in want of Portable Forges will address W. G. HYNDMAN, ap23 41 East Second street, Cincinnati, O.

AMERICAN AND FOREIGN PATENT AGENT

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1500 TONS RAILS, 57 lbs. per yard; 500 tons do., 60 lbs. per yard, the best English make.

Also, 1000 tons do., 57 lbs. per yard, the best American make; all New York and Erie pattern; deliverable in bond, or duty paid. For sale by

THEODORE DEHON, feb5-tf 10 Wall st., near Broadway, New York.

ALLEN & NOYES'

METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

fy23-1m

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

oct29-6m

T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is respectfully called to this new and much desired improvement in Railroad Cars.

Any information that may be desired, can be obtained of the undersigned owners of the Patent.

T. T. WOODRUFF, } Alton Ill.
G. R. DYKEMAN, }
O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois.

JAMES FOSTER, Jun.,

Mathematical and Philosophical Instrument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all kinds, Barometers, Thermometers, Spectacles, Microscopes, etc., always on hand. Repairing attended to.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellow Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.
my8 No. 98 Pearl street, Cincinnati

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

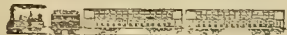
Its density is greater.
Its welding nearer perfect, and
Its durability superior.

Unlike other new forms of rail, it can be put down upon the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.

Norris' Locomotive Works,

PHILADELPHIA.

ENGAGED for many years in manufacturing Locomotives, offer to Railroad Companies to construct of any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.

Our facilities for doing work have been largely increased this year, and orders can be executed with dispatch.
Jy. 27. RICHARD NORRIS & SON.

IRON BOILER FLUES

PASCAL IRON WORKS.

ESTABLISHED 1821.

MORRIS, TASKER & CO.,

Manufacturers of

LAP-WELDED BOILER FLUES,

of 7 inches outside diameter, cut to definite length as required.

WROUGHT IRON WELDED TUBES,

from 3/4 to 5 inches bore, with Screw and Socket Connections. T's, L's, Stops, Valves, Flanges, etc., etc.

Warehouse, 209 South Third St.,

PHILADELPHIA.

[sig]

STEPHEN MORRIS,
THOS. T. TASKER, JR.,

CHAS. WHEELER, JR.,
S. P. M. TASKER.

RAILROAD IRON.**LOCOMOTIVES.**

4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 40 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by

H. GOODMAN & CO.,
Feb. 7, '56-2m.] No. 7 Wall St., N.

OLD STAND.**Railroad and Car Findings.**

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)

Will continue the Railroad and Car Furnishing Business, and deal in

Locomotive & Hand Lanterns,**ENAMELLED HEADLININGS,**

Brass and Silver Trimmings,

COTTON DUCK FOR CAR COVERS,**Portable Forges and Jack Screws.**

Bolts, Nuts and Washers, Shop and Bridge Bolts, and Iron Forgings of almost every description, etc., etc., at the OLD STAND,

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission, or from our regular business, respectfully solicited

ALBERT BRIDGES.

Of the late firm of Bridges & Bro.

Feb 11

JOEL C. LANE

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars

Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market St.,

1 n21 NEWARK, N. J.

**MOSELEY'S
TUBULAR WROUGHT IRON****ARCH BRIDGES AND ROOFS.****THESE BRIDGES AND ROOFS HAVE**

now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

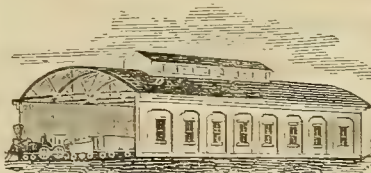
We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$3 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish Iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White Oak with which we think we can build Cars as cheap and as well as any other establishment in the State.

Feb. 16*

JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES

METALLIC SELF ADJUSTING CONICAL PACKING,

DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer.

Nov

64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, JR., Civil Engineer.
No. 2-S H Street, Washington, D. C. April 2

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturers, Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair of Ohio Mechanics' Institute. June 18, 1855—ly

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 158.

JOSE. LIVINGSTON & CO.,
9 South William St., N. Y.

Mar. 25, 11.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,

PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 3:19 A. M.; in Washington 10:30 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

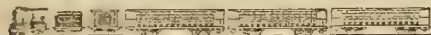
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

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ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

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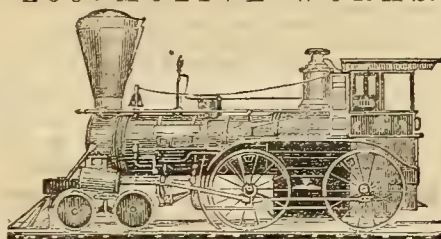
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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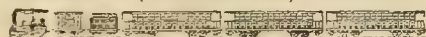
The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

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Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

1:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, &c.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

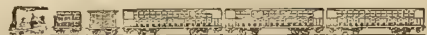
Leave Dayton at 8:05 A. M., 2:30 and 6:50 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

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A Steamer leaves Racine for Chicago every evening.

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ROBERT HARRIS, Sup't.
Racine, May 15, 1857. my21

H. S. DURAND, President.

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Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

Union Works, Baltimore.

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Iron Founders & General Machinists,
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WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

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KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

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Locomotive Works,
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generally, with the utmost promptness and despatch and in the best style.

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MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDE IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
W. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, SEPT. 9, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING

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✂ Judge Jewett has been re-elected President of the Ohio Central Railroad; W. B. Brooks and James H. Carter, of Baltimore, have been elected directors in place of James McKeehan and W. Tallant. With these exceptions, the old Board was re-elected.

✂ The receipts of the Lexington and Frankfort Railroad, twenty-nine miles in length, from May 1, 1857, to July 1, 1858—

Have been.....	\$128,741 29
Operating expenses.....	60,410 65
Net earnings.....	\$68,330 64

Operating expenses includes expense in buildings, stations, rails, and road-bed.

The road and equipment have cost to July 1st, 1858, \$637,071 93, or \$21,687 93 per mile.

VOL. 6.—No. 29

CINCINNATI AND HER NORTHERN ROUTES AND COMMUNICATIONS.

In the last number of the *Record*, we made a statement of the advantages of the Kentucky Central (when completed,) not only to Kentucky and the great railroad companies, but to the city of Cincinnati, to which it has already become a matter of paramount necessity. We propose now to glance at the position of Cincinnati in reference to the Northern Border. By this, we do not mean her relation to New York, Chicago, or St. Louis, but strictly speaking, to the Northern Border, now rising rapidly to an importance it has never had. In this region is included Northwestern Ohio, Northern Indiana, the Peninsula of Michigan, Western Canada, the Lake Superior country, and the British possessions to the north of Huron and Superior. The climate in the northern portion of this region is so much colder, and the soil so hard, that the great column of human migration has proceeded in a parallel line, something farther to the south. But, the recent openings in mines, commerce, fisheries, lumber, and even in agriculture, (for the soil is found quite rich,) is dividing the column of immigration more to the north, and making it certain that the entire region which lies around Lakes Michigan, Huron, and Superior will soon be densely populated, and filled with the marts of thriving population. How great a country this is, and how easily reached from Cincinnati, few, we apprehend, have properly considered. Let us try a test, which will enable us to see both the extent and accessibility of that country.

1. Take for a *radius* the straight line distance from Cincinnati to New York, and with Cincinnati for a centre, make a sweep, and you will find it includes all of Canada West, to the great Ottawa River, extends one hundred miles north of the Straits of Mackinaw; includes the Superior Mining region, and reaches the mouth of the St. Peters' River, in Minnesota! Now we are all familiar with the route to New York, and make the distance in thirty hours. Look, then, at this great and comparatively unsettled country to the north, as within the same distance, and we shall readily comprehend what an immense territory yet remains on the north to be reached and possessed by Cincinnati enterprise.

2. Let us next consider the extent of this territory. The northern half of Michigan; a part of Canada West; the Superior country, and a part of Minnesota, make up together about one hundred thousand square miles, or more than equal to two large States. This, it will be observed, is beyond, and exclusive of all the nearer territory of Michigan, Wisconsin, and Indiana. This territory is an immensely productive one, in all the products of the field, forest, mine and water.

3. Let us next see how far Cincinnati has

now the means of communication, and how far she can extend the means?

If we look to the points in this extensive region which must be reached in order to be commercially and beneficially connected with it, we find these, viz: Sandusky, Toledo, Detroit, Port Huron, Sagiwan, Mackinaw City, St. Marys, La Point, and Superior City, and St. Peters. Now, of these ten important points of the North, we really have railroad communication directly with but *one*—Sandusky City!

In order to see what must be done, in order to connect Cincinnati with each of these points, let us see what has been done, and what is planned.

1. The only *direct* railroad line we have to either of these points is the Cincinnati, Dayton and Mad River Line to Sandusky. This is one of the earliest railroad lines projected from Cincinnati, and is now in complete and successful operation. The *Cincinnati and Dayton Line*, which, at first, was under some embarrassments, is now one of the most prosperous lines in the country, and there can be no doubt it will continue so.

2. The *Dayton and Michigan Road*, from Dayton to Michigan. This road is partly completed, and is in course of construction, with fair prospects of success. We find that the road is now operated for seventy-two miles, to Lima, Allen county, which is about half way to Toledo. A large part of the work is done on the northern half, and its entire completion, at an early day, is confidently anticipated. The construction of this work will have an important bearing on the northern interests of Cincinnati, and still greater one on the prospects of the Cincinnati, Hamilton and Dayton Road. To say nothing about the connection with Toledo, and other towns, lying round the west end of Lake Erie, the intermediate country is a fertile and fast settling region, which of itself, will supply a moderate business to a railroad through it, and to this line there will be no competition in the space which is legitimately attached to it.

3. The *Grand Rapids and Indiana Railroad*. No part of this road is made, but it is one of those to which the government has granted land of great value. The act of Congress, granting these lands, requires that the road should pass from Grand Rapids to Traverse Bay, or near there. In connection with this, the act created, or required three other roads, viz: from Amboy, on the State line, through Lansing to or near Traverse Bay; another from Little Noquet Bay to Marquette, in the Superior Country; and lastly, from Grand Haven to Port Huron. At or near Traverse Bay has been very properly constructed to carry the lines of the Grand Rapids and Amboy Company to the straits of Mackinaw, where there is likely to arise a large city, which will be a mart and centre for the

commerce of the Upper Lakes. The lines to Marquette and Port Huron, are *lateral* to the Mackinaw Road, and connected with them, so that, if these several roads are constructed, they will connect with Port Huron, Mackinaw, Marquette, Superior, etc. The Wisconsin lines, when finished, will connect with La Point and St. Pauls. From this review, it will be seen that the question, whether Cincinnati shall reach, and be profited by the great and undeveloped country round Lakes Huron and Superior will depend mainly on, whether the Michigan Lines can be completed? The *Grand Rapids* and Mackinaw Line is connected with the *Fort Wayne* Line to Cincinnati, of which we have before spoken, and upon which considerable work has been done. As we remarked, in regard to the *Grand Rapids* Road, there is a large grant of government lands. What is thought of its value, in reference to the road, will be known by an extract from the Report of the *Grand Rapids and Indiana Railroad Company*. This Company had the laws and the lands examined, and come to this result:

"Their proximity to lake navigation; having several navigable rivers passing through them; the abundance of hydraulic power; the healthfulness of the climate; the fertility of the soil; and lying immediately on the line of this road, are facts which contribute to enhance the value of these lands.

"Should the Department at Washington be governed by a narrow policy, and confine the grant to 614,460 acres, then, at \$10 per acre, it will amount to \$6,144,600, which is a good basis for the company; but should a liberal policy prevail, then the lands will be sufficient to reach the sum of \$8,256,000.

"The length of this road, from the Straits of Mackinaw to Fort Wayne, will be about 350 miles. If the Company meet with as good success as the merits of the enterprise deserve, the entire cost of the road should not be over \$25,000 per mile, which makes an aggregate sum of \$8,750,000.

"On the supposition, that the minimum amount of land is obtained and sold, at half the price above stated, there will yet be broad enough basis to secure the construction of the work.

"The Amboy and Lansing Company are equally confident of success. They have also located a large quantity of land, and expect their value to be equivalent to the construction of their road. Accordingly, they have put a portion of their road under contract, and have obtained large local subscriptions."

Even, on the supposition, that the lands will not immediately sell for what they are estimated at, it is, nevertheless, certain that the railroad will make them worth so much. The present alarm on the subject of railroad securities may prevent present negotiations for the construction of these works; but, nothing is more certain, than that the com-

panies have an ample fund for the *ultimate* construction of these roads. When made, they will connect Cincinnati with the whole vast region, which we have described, and be of incalculable benefit to its commercial prospects.

THE POST-OFFICE AND ITS EXPENSES.

The Post-Office Department has got into a most extraordinary condition. It now actually costs *fourteen millions per annum*; of which some five millions are paid by the government, independent of the receipts of the Post-Office. The amount paid for Ocean Mail Steamers is \$1,460,750. The others are as follows:

APPROPRIATION FOR THE POST-OFFICE.	
For Transportation of mails.....	\$10,140,520
Compensation of postmasters.....	2,325,000
Ship and way letters.....	20,130
Wrapping paper.....	51,100
Post Office furniture.....	5,000
Advertising.....	65,000
Mail bags.....	65,000
Blanks and paper.....	125,000
Locks and keys.....	15,000
Special Agents.....	70,000
Clerks.....	850,000
Postage stamps.....	100,000
Miscellaneous.....	180,000
Total.....	\$14,035,520

This \$14,035,520 is to be paid out of the receipts of the Post-Office. If those receipts do not suffice, then \$3,500,000 is to be paid out of the general Treasury. This, with the amount paid for Ocean Steam Mail above, makes \$4,960,750. In addition to this is \$700,000 appropriated for the mail service of two Houses of Congress, making \$5,660,750 expenses of a system which it is admitted should be self-supporting.

MONEY PLETHORA.

We extract the following view of the Money Market from the New York *Economist*. As a review of *facts*, it is entirely correct; but, in speaking of *causes*, it entirely overlooks the great, and almost only cause of financial and commercial distress in this country, viz—*overtrading*. In the last current year, the imports of *foreign merchandize* has fallen off nearly *one hundred millions*, and this is a most fortunate circumstance. It has saved the great body of the community from the losses which fall so heavily on the commercial classes. We had carried on foreign trade to a most enormous and disastrous extent. That caused our disaster, and the reduction of that trade has cured it.

MONEY PLETHORA.

This week the state of the financial world presents a strange contrast to what it did on the corresponding date of the last year, when the panic developed its virulent type. The highest point of the loans last year was August 8, and the contraction was \$10,000,000 in August closing with a perfect fright, caused by a decrease of \$4,300,000 in loans in the one week ending Sept. 5th. It is curious to contrast the loans through August this year, with what they were for the same month last year, as follows:

	1857.	1858.
Aug. 8.....	\$122,677,252	\$120,594,557
Aug. 15.....	121,241,479	121,374,439
Aug. 22.....	120,129,582	120,262,241
Aug. 29.....	116,766,019	126,094,424
Sept. 5.....	112,221,365	
Sept. 12.....	109,065,572	

When we look back at these figures, and reflect that they took place after six months of the most desperate "bear speculation" in the stock market, accompanied by incessant "panic articles" in the daily press, it can be no matter of surprise that distress came. The loans this year are no doubt due to some extent to the government loans, but the amount has increased six millions, when last year they diminished six millions, followed by a further contraction of \$12,000,000 in Sept. That intense distress resulted, and vibrated all over the commercial world. The distress so created has been cured to some extent by sacrifice of property, cessation of industry, and great loss of national wealth, through the forced idleness of the working masses. The only persons who profited were a few brokers and their accomplices who had operated for the fall, and some have gone now to tours to Europe with their ill-gotten gains. The market, as well as all industry, remains paralyzed, and a remarkable instance of this is seen in the "clearings." These have been in August as follows, weekly average per day:—

	1856.	1857.	1858.
Aug. 8.....	\$30,771,989	27,003,256	17,115,837
Aug. 15.....	21,602,499	23,141,400	15,214,790
Aug. 22.....	21,605,443	23,122,572	15,119,803
Aug. 29.....	21,155,957	23,952,164	16,207,039
Sept. 5.....	20,170,624	22,220,703	16,308,039

The amount of business done is apparently about 60 per cent. of the sum of last year, but it will be borne in mind that the stock transactions furnish most of the "clearing" operations. They are all done by checks on banks, to be made good at the close of business, and these go into the clearing-house next morning to swell the amount of exchanges. When the stock transactions are \$10,000,000 in a day, the amount is larger than when the business dwindles to \$500,000 in a day.

Money meantime accumulates, and the deposits in bank are to-day \$30,000,000 more than for the same day last year, through absence of all employment for it. The panic has spent itself, debts are liquidated to a considerable extent, but business, so rudely shaken, has not yet revived.

STEAM BOILER EXPLOSIONS.

EDITORS OF RECORD:—The communication from me published in the *Gazette* upon this subject, on the 14th of July, I this day see was noticed in an article in the *Railroad Record* of the 22d. Mr. A. B. Latta, afterwards on the 28th of July, addressed a letter to the Editors of the *Railroad Record*, published in that paper on the 29th, in which he says he wants "Mr. Harshman to put up a boiler of the regular size, some twenty or thirty feet long, set in the usual manner in any of the localities where these eternal humbugs prevail to the greatest extent, and after getting it to work to the best of his ability, let me or some one else who knows how to explode a boiler, get it in a condition to explode, and if we fail, then the theory you set forth is entitled to some weight."

He also says that "these little experiments

on a miniature scale, (alluding to those performed by me) do not satisfy any one acquainted with the working of the steam boiler," and that "the fuel *pretended* to be saved also demands an explanation."

Mr. Latta seems to think, very confidently, that he *knows* just "how to explode a steam boiler," and to put it in that critical condition.

I do not propose to be concerned in any mere private experiment, to overcome the prejudices of Mr. Latta, or any other one or more gentlemen.

If any respectable body, municipal or scientific, will appoint a committee of competent and impartial men to conduct the experiment, and see that it shall be fairly made, Mr. Latta can embrace the occasion to display his liberality, by furnishing a boiler, location, etc., (as he proposed to the Editor of the *Rail-road Record*,) and I will pledge myself to put it in such a condition as to defy even Mr. Latta's skill on exploding boilers.

With regard to the "explanation" in reference to the saving of fuel, I can not see how any is necessary, unless a question of veracity is raised against the editors of the *Railroad Record*. They say distinctly from "actual experiment and long experience" the saving of fuel is at least equal to two-fifths."—(40 per cent.)

This, it seems to me, sufficiently explains
itself. Respectfully,

Respectfully,

JACOB HARSHMAN.

DAYTON, August 28.

REPORT OF THE DIRECTORS TO THE STOCK-
HOLDERS IN THE MEMPHIS AND CHAR-
LESTON RAILROAD CO.

MEMPHIS AND CHAR. R. R. OFFICE, }
MEMPHIS, July 1, 1858. }

In accordance with the requirements of your charter and by-laws, the Directors herewith submit their Eighth Annual Report.

At the date of our last annual report, the prospects of the then growing crop were exceedingly promising, and bid fair to result in at least an average crop, if not beyond it. But the drought and frost came, and the crop was cut short: scarcely, if any, above two-thirds of a crop of cotton, the great staple of the country, having been gathered and sent to market from that section of country through which your road passes.

The monetary affairs of our country at your last annual meeting were, *to all appearances*, in an easy and prosperous condition: but they, too, like the seasons, were subject to change. It will be recollected by all that in less than sixty days from the day of your meeting, one of the most frightful and disastrous panics in finances commenced in New York that ever swept over this or any other country. Nor did it stop until it had spread its devastating influences over the entire West and South, creating distrust and prostrating credit until confidence seemed to be totally destroyed in banks and all other corporations, as well as the wealthiest and most reliable men and business houses in the country.

Under the influence of such a panic and

want of confidence, most of the banks and business houses of the country were forced to suspend payment, as well as many of the largest and wealthiest railroad companies — These influences, to a great extent, prostrated and destroyed the active commerce of the country. Every farmer ceased to buy any thing he could possibly do without ; the merchant failed to renew his stock ; each, if not himself affected, seemed at once to sympathize with those who were suffering from the effect of the panic, determined to stay at home, and see how near he could live within his own resources, until he could see the end of such times.

These things had their effect upon the receipts of your road, by greatly decreasing both freight and travel. Under all these disadvantageous circumstances, and the fact that the East Tennessee and Virginia connections were not made as early, by some months, as we expected; the loss occasioned by about two weeks' stoppage of passenger receipts by two of the most remarkable and extraordinary floods, in December and April last, that has visited the country since its settlement; and the fact that the past has been the first year of your road's operations, and its business as yet almost entirely undeveloped, the Board think the stockholders have cause to be gratified at the result of the year's business.

The Board, in their last report, estimated the receipts of the road from the 1st July, 1857, to 1st July 1858, at one million of dollars; expenses at \$450 000—net profit \$550,000. The actual result of the year's business shows that the receipts and expenditures are as follows:

Receipts from	Passenger transportation.....	\$592,563 70
" "	Freight " ".....	337,145 69
" "	Mail " ".....	27,775 00
" "	Express " ".....	6,672 27
" "	Privileges " ".....	250 00
" "	Other sources.....	14 90
Total receipts.....		\$904,410 65

OPERATING EXPENSES.

Eastern Division.....	\$197,714 68	
Western "	250,558 12	
	<u>448,272 80</u>	
Net earnings.....	\$516,137 85	

Construction expenditures to July 1, 1857..	\$5,839,550 09
From July 1, 1857, to July 1, 1858.....	185 292 36
Total cost of Road to July 1, 1858.....	\$6,024,842 50

The cost of road and outfit being \$6,024.642 59, and the net earnings being \$516,137 85-100, shows that the road has earned 8 57-100 per cent. for the year upon its entire cost and outfit.

From the condensed Treasurer's balance sheet, it will be seen that the interest and exchange paid during the year on funded and floating debt has been as follows :

GENERAL INTEREST AND EXCHANGE ACCOUNT.

Includes interest and Exchange on Floating Debt, and Exchange on the Interest due on our Company and State of Tennessee Bonds, which, during the existence of the panic, was very exorbitant.

	To July 1, 1857.	From July 1, '57 to July 1, '58.
General Interest and Exchange Account.....	\$ 76,528 99	\$ 79,394 24
Interest on Co.'s Bonds.....	135,000 88	104,538 93
Interest on State Bonds....	190,426 36	66,000 00
	<u>\$ 401,956 23</u>	<u>\$ 249,933 17</u>
The net receipts as shown being.....		\$16,137 82
Deduct the above sum paid Interest and Exchange on Funded and Floating debts.		249,873 19

Leaves as net profit, after paying Interest
and Exchange on all Borrowed Capital., \$266,254 00

The entire capital stock paid in being

\$2,258,115 10-100, as shown per Treasurer's balance sheet, the above balance of net profits, after paying interest and exchange on Funded and Floating debts, leaves to the stockholder 11 80-100 per cent. upon his capital paid in.

The financial condition of the Company is shown from the condensed abstract from the Treasurer's books, which is marked No. 2, giving in detail the liabilities and assets of the Company on the 30th June, 1858. You are respectfully referred to this report for such information as you may desire in that department. From this statement it will appear that the receipts of the company from all sources have been as follows :

RECEIPTS.

Capital Stock paid in.....		\$2,258,115 10
Company bonds sold.....	\$1,98,000 00	
Company bonds hypothecated.....	304,000 00	
Due State of Tennessee.....	1,092,000 00	
		2,594,000 00
Bills payable.....	\$965,677 43	
Individual dues.....	158 013 80	
Connecting roads.....	14,300 59	
		837,991 82
Profit and Loss to 1st July, '57.....	792,510 44	
Suspense account.....	7,828 53	
Net earnings from 1st July, '57, to 1st July, '58.....	516,137 85	
		1,316,476 82
Total receipts.....		\$7,006,583 74

DISBURSEMENT.

Cost of road and outfit as per table No. 1.	\$6,024,642 59
Interest on Company Bonds.....	\$23,931 83
Interest on State Tenn. Bonds.....	236,426 36
General interest and exchange account.....	155,863 23
	<hr/> 651,831 42
Bills receivable.....	45,634 27
City of Memphis.....	42,180 00
Individual dues.....	91,285 51
Due by agents.....	12,664 62
Connecting roads.....	26,728 32
Cash on hands.....	9,060 85
	<hr/> 157,763 58
Paid for road materials on hand Stock account, Mississippi Cen- tral R. R.....	55,036 95
Huntsville Hotel.....	92,916 10
Florence Branch.....	6,176 63
Through Ticket Agency.....	3,972 79
	<hr/> 566 57
Personal estate, negroes, etc.....	<hr/> 164,669 04
	7,687 11

Total disbursements.....	\$7,006,583 74
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The liabilities of the Company are as follows :

FUNDED DEBT.

Due to State of Tennessee 6 per cent. bonds due 1892.....	\$1,092,000 00
Due to Company bonds issued 7 per cent., due 1880.....	1,600,000 00
Amount funded debt.	<u>\$2,692,000 00</u>

FLOATING DEBT.

Bills payable, maturing from date to two years.....	\$665,677 43
Individual dues.....	158,013 80
Connecting roads.....	14,300 59
	<u>\$837,991 82</u>

From which deduct active assets:

Bills receivable.....	\$45,674 27
Individual dues.....	21,285 51
Due by agents.....	12,864 62
Cash on hand.....	9,060 86
Connecting roads.....	26,728 32
Seventy-two Company Bonds unsold.....	72,000 00

187,573 58
\$650,418 24

By balance due from City of Memphis, which is good, and will probably be paid in time to meet floating debt.....	42,186 00
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Balance to pay floating debt, over active assets.....	\$608,938 24
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Add to this sum balance of construction and equipment, based upon last year's report, which was estimated at \$263,100, to be expended in construction and equipment at that time; of this amount there has been expended within the past year, as per table A, \$185,202 50—leaving balance to be expended.....

Which will leave balance required to paying floating debt, including amounts necessary to complete Construction and equipment for the present wants of the Ford.....

From the foregoing exhibits, it will be seen that the net earnings of the road, from the commencement of operations to the present date, have been..... \$1,316,476 82

From which must be deducted:

Interest on Company bonds.....	\$239,541 83
" " State Tenn. bonds.....	256,426 36
" " and exchange on floating debt.....	155,863 33
	651,831 42

Net earnings, after paying interest on all borrowed capital..... \$654,645 40

A sum equal to 29 per cent. upon the entire capital paid in, after paying running expenses, interest and exchange on floating and funded debt.

This amount of net earning has necessarily gone into construction, and, in the opinion of the Directors, should, at a proper time, be declared in a stock dividend, thereby increasing each stockholder's stock to that extent, as has been heretofore recommended.

At your last annual meeting you authorized the Board to issue an amount of income bonds (under certain restrictions) sufficient to pay off the floating debt. The condition of the monetary affairs of the country since your meeting, has been such, that there was no possible chance to effect a negotiation upon the terms authorized, and the Board has not deemed it prudent or advisable to go to the expense of having the bonds issued.

Without speculating on the future, the business of the road of the past year demonstrates the fact that when the floating debt of the company is paid, the stockholders may confidently expect to receive a very remunerating rate of interest on the capital they have invested. It must be apparent to all that the business of the road, when fully developed, must become very large and profitable. The estimates of the board for the past year would have been fully realized but for the extraordinary floods in December and April, which not only greatly decreased the receipts of the road, but increased its expenses between thirty and forty thousand dollars over and above its ordinary expenses.

MAIL SERVICE.

The Board of Directors have lately entered into a contract with the Post Office Department, for carrying the through mail between New York and New Orleans, over this line, for four years from the 1st of July, 1858, at a price much more remunerative than that heretofore received. By the terms of this contract, double daily service will have to be provided for after 1st of July, 1859. This increased mail service will probably require more equipment than is provided for in the foregoing estimate, but the increased mail pay that will be received in consequence of increased service, will be amply sufficient to pay for the additional equipment required, which will not have to be paid for during the coming year. It is believed that this double daily service will greatly increase the receipts of the road in the passenger department, both local and through.

NASHVILLE AND CHATTANOOGA EXTENSION.

A contract has been entered into with the Nashville and Chattanooga Railroad Company since your last meeting, for a term of thirty years, for the transportation of your freights and passengers over that portion of their road between Stevenson and Chattanooga, by which the cars of your road now run to Chattanooga; the terms of this contract are believed to be fair, just and equitable to both parties, and supersedes the necessity of your building an independent road on the north side of the river to Chattanooga. A

copy of said contract is herewith submitted for your consideration.

FLORENCE BRANCH.

You are referred to the Chief Engineer's report for the cost and condition of the work on this branch. The work is progressing very satisfactorily, and it is believed that the Branch will be in operation in time for the transportation of the prospective cotton crop.

All of which is respectfully submitted by order of the Board.

SAMUEL TATE, Pres.

[From De Bow's Review.]

MISSISSIPPI SEEKING A GULF OUTLET.

The people of Mississippi are again actively employed in considering the advantage and feasibility of connecting her other railroad works with a road which shall extend to the Gulf of Mexico, somewhere in the vicinity of Ship Island, and thus create an outlet for her productions, and a commercial city at that point. This is a project which was broached as early as 1837, and has from time to time received the favoring consideration of the Legislature. The most liberal charters and grants have been made. At the last session a new and more liberal charter than ever was granted, and commissioners were appointed, who have issued a very elaborate and able address to the people. In his report the engineer says:

"The Gulf and Ship Island railroad is projected on the ground that a sea-port may be established on the Gulf coast within the limits of the State of Mississippi, thus completing her commercial facilities within her self, and enabling her not only to reap the harvest of her own rich production, but to share likewise those of her sister States. To this point, our road is to be the main trunk line and principal feeder, and as such alone can we discuss it, in regard to the question of location."

We proceed to make several extracts from the address of the Commissioners: As a citizen of Louisiana, we have no objection to the enterprises of our neighbors, but, on the contrary, ever held the doctrine that opposition is the life of all industry and trade. New Orleans and Mobile will not slumber in the race.

A complete hydrographic survey, the necessity of which is pointed out by Mr. Robinson, is fortunately furnished to us by the accurate survey of Ship Island harbor made by the United States Coast Survey. We find from authentic maps of that survey a harbor on our southern coast of twenty miles in length, by ten miles in breadth, with an average depth of water twenty to twenty-four feet, sufficient for the largest class of ships, and greater by six to ten feet than the depth of water on the bar at the mouth of the Mississippi, over which every ship arriving at, or departing from New Orleans must pass with the assistance of tow boats. The fact that such a harbor exists is not a mere matter of speculation or conjecture. Ships drawing over twenty feet of water, that could by no means reach New Orleans, are often to be found loading at Ship Island with lumber and other products of our southern coast for the distant shores of England and France, and of Australia. On the cargo of such a ship, the saving of expense in favor of Ship Island harbor, as compared with that of New Orleans, is known to be about two thousand dollars—a sum quite sufficient to divert a large amount of the foreign trade of our State.

While every portion of our State would de-

rive benefit from the construction of the proposed road, the counties of Rankin, Simpson, Lawrence, Covington, Marion, Hancock, Perry and Harrison would derive the largest benefit, in the increased value it would give to their lands, by opening a ready market for all their production.

The cost of the road, as estimated by Powhatan Robinson, Esq., the engineer is..... \$2,901,500

The Internal Improvement Fund amounts to..... \$733,970

Three per cent. fund..... 104,750

The lands donated by Congress may be estimated at 200,000 acres at \$1 25 per acre..... 250,000

1,067,500

Leaving to be otherwise provided for..... \$1,902,850

We do not hesitate to condemn the man whom nature has endowed with great energies, but who, failing to exert them for himself or for others, wastes them in idle pleasures, or suffers them to waste in inactivity. A larger measure of blame attaches to a State which can do much and yet does nothing; neglecting all the advantages which she derives from abundant resources and a favorable geographical position. We have a front on the Gulf of Mexico more than sixty miles in extent, with a fine harbor. The most magnificent stream in the world washes our western border. We have soil of great and varied capacity for production, but especially yielding an abundance of that production which exerts the widest and most decisive influence on the commerce of the world. We are fortunately placed near the seat of empire. We are part owners of the great river, and part owners into the great gulf into which it empties. Our position compels us to be parties to the important transactions of which the Gulf of Mexico is the destined theatre. Let us sustain the part which nature seems to have designed for us. No purely agricultural people ever attained a high position in the world. Let us make the effort, in which we will be so much assisted by our position and resources, to combine commerce with agriculture, and these uniting, will soon bring into existence manufactures and the arts, and we shall thus present the noble spectacle of a well-ordered State, complete in all her appointments. We are deficient in those things which railroads and commerce supply. They will diversify and multiply our pursuits, and fill up that void which exists between the planter and the learned professions, and give useful occupation to the race of loungers who complain, with some reason, of "nothing to do." It is a well known fact that that class of men who have the talent and inclination to engage in mercantile pursuits on a large scale, abandon our State, and employ their capital and abilities elsewhere. That class of men who have given to England her vast empire, and elevated her to the splendid position she occupies among the nations of the earth; the class which has built up the great commonwealth of New York, is represented in Mississippi, in a great measure, by shop-keepers of that race of men who live under the curse of lost nationality. This evil results from a want of a great commercial emporium in the State. We are in contact with the great highways of trade, and might become formidable competitors for that rich commerce which, great as it now is, is yet in its infancy. * * * * *

State pride is gratified with the dubious honor of having judiciously applied certain trust funds, for which we are indebted to the bounty of the national government, to enterprises set on foot by these cities who are com-

peting in our borders for the largest share of our great resources. This is Mississippi, whose taxable property amounts to over four hundred millions of dollars! This is Mississippi, lying in the very track of the richest commerce of the world! This is Mississippi, with her fine harbor and great river! This is Mississippi, in an age marked by a spirit of enterprise which spurns all obstacles, and at the crisis of the great game of empire and influence, in which her sister States are engaged with a noble rivalry! We are like those northern militia who stood debating a point of constitutional law, in full view of the battle on which their country's honor was staked. * * *

It requires no argument to convince a reasonable mind that, with the great lines of railroad which connect us with almost every part of the Union, completed as they will be in a very short time, and followed by a first class road connecting those lines, at or near the center of our State, with our harbor on the Gulf coast, a large city will spring up there, in spite of the rivalry of Mobile and New Orleans. The laws of trade and navigation are inexorable. They defy all combinations, and baffle the skill of the financier. The foreign merchant is not attached to any particular port in the United States, unless that port offers advantages in respect to the matter of pecuniary profit. If we place our cotton on our sea-board, at a point where vessels may come and receive it with less expense, and in a shorter time than is required at other ports, there they will come to receive cargoes. This advantage we will have. The consequences which will follow the growth of a large commercial town on the sea-board may be readily foreseen. A large addition to the capital and resources of the State, an important addition to our influence on the Gulf, the creation of a great controlling center of business and trade, a secure outlet for our great productions under our own immediate control, would be the results. The contributions by which we annually swell the stream of wealth which is flowing to the cities of our sister States would enrich our own, and a great commercial interest would be added to a great planting and producing interest.

Under the natural operation of these influences, the State of Mississippi must take a high rank in the Union or out of the Union.

CHINA TRADE.

The new treaty of peace with China seems to excite high hopes of increased trade with that great empire and its 400,000,000 of human beings. But there is no good reason to suppose that while the insurrection has such a lead that there will be any great renewal of purchases of goods by that nation. There was indeed some developments of trade after the treaties of 1844, but by no means as much as had been expected. For a great many years the trade was stationary with the United States, but since the English war it has been developed. The aggregate imports and exports were as follows:

UNITED STATES TRADE WITH CHINA.

Exports.			
Domes. goods.	For'n goods.	Total.	Imports.
1821....\$188,575	\$3,002,025	\$1,200,560	\$3,111,951
1831....244,790	1,048,045	1,290,235	3,083,205
1841....715,322	455,494	1,200,816	3,095,388
1851....2,155,915	1,19,342	2,18,257	7,065,144
1853....3,212,274	524,418	3,736,692	10,573,710
1854....1,293,925	101,163	1,395,088	10,576,221
1857....2,019,000	2,375,230	4,394,230	8,236,952

The rise in domestic articles sent to China up to 1853 was in domestic cottons. Of the \$3,212,574 sent in that year, \$2,801,031 was in white cottons. These since fell off, mostly under the influence of political difficulties there. The large exports of foreign merchandise in 1857 consisted of silver and gold, of which \$2,074,465 was sent thither, and nearly the whole amount from San Francisco. The disturbed state of China has to a considerable extent caused the hoarding of specie, the disposition to sell produce for specie as much as possible, and to economize the purchase of goods. The exports of cotton manufactures for some years to China, were as follows:

	Printed.	Colored.	Others.
1851.....	—	\$1,594,418	—
1852.....	—	2,301,496	—
1853.....	\$50,246	2,811,051	\$82
1854.....	79,196	880,575	2,102
1855.....	73,620	511,582	3,319
1856.....	107,108	720,911	20,680
1857.....	131,815	955,768	6,435

There is no doubt but that there is a great field in China for the consumption of cotton and woolen goods, among 400,000,000 whose dress is largely cotton, and of which they can not consume less than 30 yards each per annum, or 10 lbs. of cotton, making a demand for 10,000,000 bales of cotton per annum; and when spinning and weaving is mostly by imperfect machinery, the field of operation is immense. India is a great cotton producing and consuming country, and formerly the English derived much cotton thence, but for the last ten years England has sent more cotton there in the shape of goods than she has obtained cotton from thence. The field for the supply of China with goods is of vast magnitude, and it is a contest between machinery and hand labor. In such a contest the result is not doubtful. If this trade remains unobstructed the teas and silks of China will be paid for in cotton cloth instead of silver. But by whom? Before the late difficulties, the American cloth was fast supplanting the English, and introduced on equal terms will doubtless do so again. The trade with China has varied at times in respect of payments. The course of trade always made a large cash balance due China, since the teas and silks imported thence were to be paid for in the metals. In the early part of the century that trade was carried on by the shipments of coin hence. That process was changed for the long dated bills of the United States Bank on London. Those bills would pass in China, when the balance was usually in favor of British India on account of the opium trade, and the bills passed thence back to London, where the credits were usually in favor of the United States. Recently the specie exports have been resumed. In the last few years the demand for China teas and silks has been so great as to enhance the amount due China to a considerable extent, and fears have been propagated that that silver demand may now take a broader scope. It is not impossible however that the reverse may be the case, and that the free ingress of machine-made goods into China may once more cause that "oozing out of cycees silver," which was one of the Emperor's strongest objections to the opium trade in 1840.—*Economist*.

The receipts of the Little Miami Railroad for August were \$113,533 00 against about \$96,000 for the corresponding month last year.

THE CROPS OF THE UNITED STATES.

The New York *Courier and Enquirer* has a very able article on the present and coming wheat crops, which are thus estimated—the latest official returns having been adopted as bases:

The production of wheat in the several States for 1858 and 1859, may be stated as follows:—

WHEAT.		
	1858. Bush.	1859. Bush.
New York.....	22,000,000	20,000,000
Pennsylvania.....	20,000,000	20,000,000
Virginia.....	20,000,000	18,500,000
Kentucky.....	10,000,000	8,500,000
Ohio.....	25,000,000	22,000,000
Indiana.....	15,000,000	13,000,000
Illinois.....	18,000,000	14,500,000
Other States.....	50,000,000	42,000,000
	180,000,000	158,500,000

The production in the Western States, which have the largest surplus for export, is shown by the following figures:

WHEAT.		
	1857-Bush.	1858-Bush.
Kentucky.....	10,000,000	8,500,000
Ohio.....	25,000,000	22,000,000
Indiana.....	15,000,000	13,000,000
Illinois.....	18,000,000	14,500,000
Total.....	68,000,000	58,000,000

The surplus for the present year in these States may be estimated as follows:

	Bushels.
Crop 1859.....	58,000,000
Consumption five bushels per head.....	32,000,000
Surplus Crop 1859.....	26,000,000

It is estimated that, in addition to this, from one-fifth to one-fourth of the surplus crop of 1858, is yet in the hands of the producers. We, therefore, have in the States as the gross

	Bushels.
Surplus Crop for 1859.....	26,000,000
Twenty per cent. do 1858.....	8,000,000
Total for export.....	34,000,000

The transportation of this at forty cents per bushel will give nearly fourteen millions of dollars to our canals and railroads.

It will probably be stated that this estimate of one hundred and fifty-eight millions of bushels is a large one for the present wheat crop, but we think it is not. In 1855 the Patent Office returns gave the wheat crop at one hundred and sixty-five millions of bushels; and it is considered as not a large return for that year. In 1855 California was put down as producing only twenty thousand bushels; last year it produced over four millions. The amount of land under wheat cultivation this year is thirty-three per cent. greater than in 1855—and the decrease per acre in the production can not be greater. The agricultural productions for this year may be estimated by adding the average annual increase to the Patent Office returns of 1855. They are as follows:—[The figures in each case show millions.]

1855.		1859.	
Production.	Value.	Production.	Value.
Corn.....	600	700	\$455
Wheat.....	165	160	238
Rye.....	14	16	10
Oats.....	170	260	110
Potatoes.....	110	160	80
Beans and Peas.....	9	10	20
Rice.....	50	60	12
Sugar, lbs.....	530	700	42
Tobacco.....	190	200	95
Cotton.....	1700	1800	140
Hay, tons.....	16	25	250
Other Products.....	243	...	250
	\$1353		\$1592

RAILROAD MORTGAGES.

IN SUPREME COURT, ERIE SPECIAL TERM, JUNE, 1868.
Knapp and others agt. the Buffalo and New York City Railroad, Aaron D. Patchin and others.

Motion on behalf of the plaintiffs for leave to amend the complaints in this action by inserting further allegations, and making additional parties, and to set aside the order of reference heretofore made in this action for irregularity, and because the report therein does not contain sufficient finding of facts in certain respects; or to open or modify the said order; or that plaintiffs have leave to discontinue this action and all proceedings therein; or to file a supplemental complaint in this action, etc.

Motion on behalf of Aaron D. Patchin that plaintiffs be required to file the referee's report herein, now in the hands of the attorney, and to enter and perfect judgment thereon within a specified time, and that defendants be at liberty to enter such judgment, etc.

D. B. Eaton for plaintiffs, J. C. Hoyt, J. L. Talcott for defendant, Patchin, Jno. Cannon in person.

Davis, J.—The papers on which these motions were founded and opposed, are extremely voluminous, and the facts alleged in them various and complicated. The argument of the motion was unusually elaborate and able. I have endeavored to give the questions presented the careful examination their importance required, and shall state my conclusions, and very briefly the reasons for them, without seeking to support them by argument, and without entering upon any lengthy statement of the facts.

The plaintiffs ask leave to amend the complaint so as to claim for and on behalf of themselves and other holders of the bonds mentioned in the mortgage sought to be foreclosed in this action, "a lien upon the whole road of the Buffalo and New York City Railroad Company, and upon the rolling stock, fixtures, and appurtenances belonging to said corporation, and necessary to the operation of its road, superior to any subsequent lien or claim of any other person or party, and so as to make all further necessary parties for the purpose of procuring an effectual judgment and establishing and enforcing such lien."

First, as to the lien upon the road itself. The mortgage of the plaintiffs, *ex re termino*, is strictly limited to that portion of the road lying between the villages of Attica and Hornellsville. Whatever may have been the motive for its preparation in this form, the person who prepared the instrument has guardedly, and with careful language, restricted the lien to clearly defined limits. This intent is obvious from the language of the instrument that no court can be justified in looking beyond it for any other possible construction.

Its language is "the portion of said railroad constructed and to be constructed between the villages of Attica and Hornellsville together with all singular, the railway, rails, bridges, fences, ware-houses, fixtures, privileges, rights, real estates, and all other property and appurtenances of the said Company, 'between the said villages of Attica and Hornellsville,' same as above now owned by the said Company, or which shall hereafter be owned by them. All the tolls, income, and profits (when said party of the first part shall be in default of making payment) to be had from the same, and all franchises relating to 'such portion of said road.' And all the lands used or occupied for railways, depots or stations within said limits, together with all buildings erected or that may hereafter be erected thereon. And all the locomotives, engines and tenders, passenger cars, freight cars, shop tools and machinery within the said limits and used within the same, and now owned or which may hereafter be acquired by said Company, or in any way belonging to such portion of the said railroad of the said Company constructed or completed or to be used thereof."

This language was not used under any mistake or misapprehension as to the length or time terminer of the road. The mortgage contains clear statements as to the intended extension of the road to Buffalo, and declares that to be one of the objects, to accomplish which the portion between Attica and Hornellsville is thereby encumbered. There is nothing, therefore, to rectify or even to explain, in order that the intent of the conveyance shall be seen. And in my opinion, until courts are prepared to strike down the actual contracts of parties and substitute other and different stipulations, it is impossible to extend the lien of this mortgage as such upon the road itself, beyond the limits it so carefully and actually defines. The plaintiffs and those whom they represent have taken this security as it is, with their eyes open, and courts have no power to parry the evil consequences of their short-sightedness, by substituting another. It is argued that the road and the franchises are an entirety, and that a corporation has no power to subdivide those and mortgage them in fragments. If the argument be sound, the effect of this mortgage of part is not that it grants the whole, but that it is void, and grants nothing, because it is ultra vires of the corporate power.

It is not profitable to pursue this point further. I think it my duty to refuse this amendment, on the ground that in no event could it avail anything to the plaintiffs.

But it is insisted that as the road and its franchises convey certain rights of continuous connection with that portion not mortgaged, which should be defined and determined by the decree, and that certain further averments and allegations are necessary to the complaint, to enable the court to make such decree. It is not shown what additional averments or allegations are essential to that purpose, and I am at a loss to see why every fact is not already alleged in the complaint, and every party made, upon which and against whom this

claim could be predicated. It is not necessary to aver mere legal conclusions; and if the facts from which they arise are stated, that is quite sufficient. Without intending to express an opinion whether such rights exist or not, it seems to me that so far as they do exist they must grow out of the character of the property mortgaged, and be appertained to it, that upon a foreclosure and sale of the mortgage, the purchaser takes them (whatever they be) with all the right to enforce them, necessary for their protection or vindication, and that the proper time to determine them will arise whenever they shall be invaded or impugned in his hands. They are probably remotely analogous to an easement upon the lands of another appurtenant to mortgaged lands, and which, upon foreclosure of the mortgage, the purchaser takes with the right to assert and enjoy it, according to its nature and extent. Nor is it practicable, in my judgment, by any amendment of the pleadings or proceedings in this action, to bring in the proceedings now pending on appeal in this court, to foreclose the mortgage on the residue of the road, so that a decree for a joint sale of the whole road can be made. The attempt to do it would lead to inextricable confusion. If the court have any power to accomplish that object, it should be exercised if at all, in controlling the execution of its process after decrees in the several actions shall have been perfected.

Second, as to the amendment in relation to the rolling stock, I think this should not be allowed for two reasons. First, because the averments of the complaint are, in my opinion, quite sufficient to support any issue that can be made and tried as to the lien of the mortgage on that property. The description of the property mortgaged is set forth "in hunc verbum." The subsequent mortgages are stated in substantially the same manner, and the junior claims pretended and real, are averred and repudiated, the character of the property, its purpose and necessity to the road are all alleged, and the prayer for relief is ample to enable the court to give to the plaintiff any right or lien in the whole or any part that they shall be able to establish.

Secondly, because any defect in the averments to the extent of the claim, is immaterial so long as the question whether they have any lien stands decided by the referee adversely to the plaintiff. The referee has found several facts in the case touching the rolling stock, from which he finds, as a legal conclusion, that the plaintiffs have no lien upon it. This conclusion, whether sound or not, is now the law of the case. The referee pro hac vice, is the court. His decision, on being filed, stands as its judgment, and is entitled to the same respect as any other judgment of the court, while it is neither vacated nor reversed. The plaintiffs are not at this stage to be heard to allege against it, that the averments of the complaint were not broad enough to let in evidence of the full extent of their claim. The referee has decided that they have "no claim," and they must first reverse that finding before the extent or character of their claim is material in the action. If, on appeal, the court should be of opinion that the referee has erred in his legal conclusions, and that plaintiffs have a lien legal or equitable on the rolling stock, then, and not before, should an amendment be allowed if necessary to assert its full extent to reopen the report of a referee by amendment simply affecting the character and extent of a claim which he has decided not to exist, would be a mode of getting rid of an adverse decision and securing a new trial, not known in any former practice and not yet found lurking in any provision of the code.

The addition of parties asked for by the motion being dependant upon the proposed amendments, is of course disposed of with them. I feel it my duty, at this stage of the action, to deny the application to amend, although before a trial and decision I might not have hesitated to allow amendments which counsel seem to regard as so important.

The plaintiffs also ask that the order of referee be set aside for certain irregularities which are specified in the notice.

The alleged irregularities do not seem to me to exist, on the contrary the order appears to be broad enough, and yet sufficiently specific, for the full disposition of the issues and matters referred; but if it were otherwise, an irregularly produced and so long continued in and acted upon by the plaintiff, should not be allowed to vacate the order but at most to cause its amendment *nunc pro tunc*.

The failure of the report (if any there be) to comply sufficiently with the requirements of the order, is no ground for vacating the order itself, though it may be a reason for a supplemental and fuller report.

The plaintiffs ask also for leave to file a supplemental complaint for the purpose of enforcing and establishing the liens to the whole of the railroads, and to the rolling stock and machinery. The same reason which led me to refuse the amendments seem to determine this part of the motion. If my opinion, that no lien beyond the point of the road described in the mortgage as hereinbefore stated can exist, be sound, then a supplemental complaint would be unavailing, so far as that claim is concerned. And leave to file a supplemental bill to assert their claims to the rolling stock and machinery in the hands of those who have subsequently acquired interest in them would be improperly given, while the question whether the plaintiffs have any claim to it, stands decided against them in the original action—such a course, I think, would be without precedent, and could hardly be justified.

After an expensive and lengthy litigation, the decision of the referee disposes of important questions in the case favorably to the defendant Patchin. Whether the decision be correct or erroneous, may as well be determined by the Court upon this report as upon any that might hereafter be made. I do not think that a just regard to the rights of the defendants permits me to

order that the plaintiffs have leave to discontinue the action.

As to the motion of the defendant Patchin, that plaintiffs be required to file the referee's report and perfect judgment thereon, it should be granted so far as to direct that the report be filed within twenty days after the service of a copy of the order entered thereon, and that unless plaintiffs apply to the Court within twenty days after each filing for judgment on the report of the referee, and proceed to perfect the same as the Court, on such application, shall direct, the defendants or any of them, shall be at liberty to apply to the Court on the footing of the report and of the order to be entered herein for such judgment or order as they shall be advised.

IMPROVED PRINTING PROCESS.

M. Chevalier, of Paris, is the author of an invention which has for its object to obtain printing surfaces, as a substitute for lithography and other similar methods of printing, the use of which, besides being cheaper than lithographic printing, offers this advantage, that a design consisting of a number of different colors can be printed at one and the same time. In carrying out this invention, any suitable permeable substance or fabric is taken, or it may be a reticulated metal surface, or metallic plate or sheet, perforated with minute holes to impart the required degree of permeability, and on this surface are drawn or written the desired characters in an ink composed of lamp black, Indian ink, gum, sugar, and salt. A coat of this ink being applied to the permeable substance in the form of the design required, the permeable substance is next coated with a thin coating or film of gutta percha, or of gelatinous material, covering the whole; when this coating is dry, the fabric is washed. The gutta percha or gelatinous material, at that part where it comes in contact with the permeable material, adheres firmly thereto; but at those parts covered by the ink it has no such adhesion, and simply holds to the ink design. The ink, being really soluble in water, is removed in the washing, and carries away the gutta percha covering it; thus the design drawn upon the permeable material becomes the only pervious part remaining in the surface. The back part of the fabric is then coated with the ink or colors required to be printed, and the ink or color having been applied, the impression is taken from the face of the fabric or substance by pressure in a suitable press; the paper or surface to be printed being placed in contact with the face of the fabric, the ink or color passes through the pervious part, and is in this manner applied and printed on the paper or other surface required.

MEANS OF PRESERVING TIMBER.

Oils are preservatives of wood, as is evidenced in the case of whaling ships, which seem to be proof against decay. Hot oil has been experimented with in impregnating wood, but while it rendered it more durable, it injured the tenacity of the fibers. From the well known preservative nature of arsenic, it would be effectual for preserving timber, but its use is attended with much danger. Timber impregnated with a solution of tannin is rendered preservative, by the tannin combining with the albumen, and forming an insoluble compound, in the same manner that leather is produced by the combination of the tannin with the gelatin of skins. Creosote is an excellent preservative of wood, and the efficacy of common tar, for this purpose, is attributed to the creosote it contains. The boiling of timber in wood tar, renders it highly preservative, but it impairs its strength. About two gallons of creosote to every one hundred gallons of water, makes a sufficiently strong solution for use. Burnett's process for

Increase.....\$ 45,488 28

MILWAUKEE AND BELOIT RAILROAD.—We learn that the Milwaukee and Beloit Railroad have effected a full settlement of all demands with their former contractors, and what is still better, paid them up in full.

Mr. Charles H. Larkin of this city, and Mr. E. H. Ball, of East Troy, have been elected as Directors in this Company, to fill the vacancies created by the resignations of Messrs. Wm. J. Whaling, and Wm. Mullins.

It is the intention of the Company to resume the work of construction without delay. The work will be let in sections.

The enterprise is too important to our city to be allowed to slumber, and we hail this resumptive of work with great satisfaction.—*Sentinel.*

COLUMBUS, PIQUA & INDIANA ROAD.—IMPROVED PROSPECTS.—By advices received from Columbus, on yesterday, we learn that the serious differences between conflicting interests in this work have been compromised, and that on Saturday the Court granted—at the request of the stockholders, as well as of the three classes of bondholders—a decree restoring the road and its furniture and equipment to the bondholders, who have authority to raise three hundred thousand dollars to finish the line to Union, and so perfect the route from Columbus to Indianapolis direct, via the Piqua and Bellefontaine roads. It is understood that arrangements for procuring the full amount named are in a forward and satisfactory state.

The Receivers, Messrs. Geo. W. Fulton and J. W. Andrews, are relieved from farther responsibilities.

It is understood that the necessary funds are advanced by the 2d bondholders. It is possible an Executive Committee, composed of one representative from each of the three classes of bondholders, and one from the body of the stockholders, will assume the general direction of affairs.—*Cin. Com.*

PITTSBURGH, FT. WAYNE AND CHICAGO R. R.—Three gangs of track laying hands are now at work on the above road.

They have completed the track, twenty miles west of Plymouth, leaving but sixty-three miles to be laid. The three parties lay from one and a half to two miles per day, and as soon as the grading of the section lying between the Rock Island Railroad Junction and the Calumet river shall have been completed, (which will be in about thirty days,) another track party will commence laying eastward from this end of the line. A ballasting party follows each end of the track laying parties, so that by the time the track is ready for use, it will be in as good and safe a condition as that of any other portion of the road.

At the recent meeting of the stockholders of the Sandusky, Dayton and Cincinnati R. R., the following gentlemen were elected Directors.

David A. Neal, Salem Mass.; Mark Healey, Coston; Elisha C. Litchfield, New York; Elijah P. Williams, Buffalo, N. Y.; N. P. Stewart, Detroit, Mich.; S. C. Parkhurst, Cincinnati; Seymour A. Winslow, Urbana, O.; Ralph E. Runkle, West Liberty, O.; John P. Yelverton, Sandusky; Oran Follett, Sandusky. Oran Follett was elected President.

MONETARY AND COMMERCIAL.

Business is dull, and currency in limited demand. The money market continues easy, more so than it was last week, and the deposits of the bankers were running up a little. Rates of interest were unaltered, but rather easier, and paper was placed yesterday at ten that would have gone as high as eleven or twelve per cent. a week ago.

The statement of the Ohio State Bank and Branches for August, 1858, is as follows:

RESOURCES.	
Notes and bills discounted.....	\$8,667,675 71
Specie.....	1,739,931 13
Notes of other banks.....	514,006 18
Due from other banks and bankers.....	866,470 58
Eastern Deposits.....	823,667 29
Checks and other cash items.....	172,027 91
Safety Fund.....	114,720 00
Real estate and personal property.....	542,750 07
Other resources.....	520,343 96

Total resources.....\$14,073,852 25

LIABILITIES.	
Capital stock.....	\$4,136,246 00
Circulation.....	6,509,085 00
Permanent reserved fund.....	576,072 83
Due to banks and bankers.....	153,441 45
Due to individual depositors.....	2,170,412 52
Contingent fund and undivided profits.....	354,516 42
Bills payable and time drafts.....	42,149 44
Discount, interest, &c.....	131,849 52
Dividends unpaid.....	1,765 60
Other liabilities.....	48,151 05

Total liabilities.....\$14,073,852 25

The receipts at tide water of the principal articles of produce, from the opening of the New York Canals, to and including the 31st ult. have been as follows:

	1856	1857	1858
Canal open.....	May 4	May 6	April 28
Flour, bbls.....	533,318	296,862	1,040,049
Wheat, bush.....	4,896,533	1,683,964	5,200,491
Corn, bush.....	5,773,533	3,359,764	3,183,369
Barley, bush.....	263,806	145,360	305,945
Rye, bush.....	.....	106,445	285,986
Oats, bush.....	3,216,369	1,465,931	2,617,619
Beef, bbls.....	39,526	2,933	7,325
Pork, bbls.....	85,684	10,366	19,244
Butter, bbls.....	373,700	133,747	148,725
Lard, bbls.....	6,705,840	513,091	1,563,972
Cheese, lbs.....	169,100	140,200	146,701
Wool, lbs.....	2,328,000	1,261,475	1,937,507
Bacon, lbs.....	7,466,600	2,043,246	2,987,206

NOTE.—The weekly return from Waterford, now overdue three days, has not yet been received. The receipts there, however, can not add much to the above tables.—*Albany Atlas and Argus.*

SALES AT THE NEW YORK STOCK BOARD.—Sept. 6.

\$5,000 U. S. 6's, '67.....	103
\$3,000 Tenn. State 6's, '90.....	90 1/2
10,000 do. do.....	90 1/2
\$2,000 Virginia 6's.....	92 1/2
16,000 Miss. 6's.....	84 1/2
20,000 do. do.....	83 1/2
100,000 do. do.....	85 1/2
2,000 Mich. 6's, '78.....	103
7,000 Cal. State 7's, new bonds.....	83
1,000 Cal. State 7's.....	83
5,000 Ill. Int. Imp., '47.....	101 1/2
6,000 Erie R. R. Conv., '62.....	32 1/2
5,000 Ill. Cent. R. R. B.....	90 1/2
6,000 La C. & Mil. L. Gt. B.....	24
3,000 Mich. S. 2d M.....	55
5,500 Ohio State 6's, '61.....	101 1/2
2,000 Louisiana State 6's.....	91 1/2
3,000 Chicago, St. Paul & Fond du Lac L. G. B.....	60
350 Shares New York Central.....	18 1/2
300 " Erie R. R.....	28 1/2
50 " Hud. River R. R.....	112
10 " Third Avenue R. R.....	49 1/2
900 " Reading.....	24 1/2
450 " Mich. S. & N. Ind.....	45 1/2
118 " Mich. S. & N. Ind. pref.....	76 1/2
50 " Illinois Cent. R. R.....	34
100 " Cleveland & Toledo.....	72 1/2
105 " Chicago & Rock Island.....	92
229 " Pacific Mail St. Co.....	49 1/2
100 " Reading Railroad.....	63 1/2
100 " Galena & Chicago.....	16 1/2
35 " Milwaukee & Miss.....	111 1/2
100 " Panama.....	23
50 " LaCrosse & Milwaukee.....	.....

IF The receipts and expenses of the Michigan Southern and Northern Indiana Railroad for the month of August, and for same month last year, as per Auditor's statement (partly estimated), are:

Total receipts in 1857.....	\$181,306 57
Total receipts in 1858.....	202,401 73
Increase in earnings.....	26,095 18
Vouchers issued in Aug., 1857.....	\$158,052 34
Vouchers issued in Aug., 1858.....	85,509 57
Decrease in expenses.....	\$72,542 77
Add increase in receipts as above.....	21,495 18
Making a gain in net earnings over August, 1858.....	\$93,637 95

☞ The August earnings of the Pittsburg, Fort Wayne and Chicago Railroad are about \$145,000. The earnings for the six months ending June 1st, are \$250,946 86.

THE LA CROSSE AND MILWAUKEE R. R.—We copy the three following "items" from the La Crosse Independent Republican of August 25:

Daylight went through the Tunnel yesterday; and now we may expect a train through it by the 20th September. No mistake about it—by the 20th we shall expect a train of cars direct from Lake Michigan!

The first day of the through trains on the La Crosse Road, last Monday, about fifty passengers came through. The trains made good time, and the employees are spoken of as gentlemanly and accommodating. The fare to Milwaukee is \$6 00, or about three cents per mile.

The passengers over the La Crosse Road make the connection for St. Paul with the Dunlieth Packets, and are not detained here but a short time.

☞ The Railroad Commissioners of Tennessee states that there will be more iron laid in that State this year than has ever been laid in any one year, viz:

The East Tennessee and Virginia Road has laid..... 27 miles.
The Cleveland and Chattanooga will lay.... 30 "

In East Tennessee..... 57 "
Winchester and Alabama..... 15 "
Tennessee and Alabama..... 15 "
Louisville and Nashville..... 20 "
Edgfield and Kentucky..... 50 "

In Middle Tennessee..... 90 "
Mobile and Ohio will lay..... 60 "
Memphis and Ohio will lay..... 25 "

In West Tennessee..... 5 "

Total in the State..... 252 "

There are now in active operation in Tennessee 670 miles of railroad. By the 1st of January next there will be 875 miles running; and January, 1860, the number of miles in operation will be 1,146.

From the New York Journal of Commerce.

MOSELEY'S WROUGHT IRON TUBULAR BRIDGE.

About two years ago the people of Cincinnati were called on to admire the principle involved in a novel plan for bridging the creeks and rivers on common Turnpike and Railroads. It was stated by the inventor that he had discovered a principle which would forever dispense with the use of wooden bridges, and provide a substitute that would defy decay, and resist the elements. That the weight of the material was fabulous, in view of the amazing pressure it would resist; that his structures had no weight of their own to support; and finally that he could erect them at about the price of wood. Besides he looked into the future, and, with inexpressible joy, saw the termination of those wholesale massacres, by which so many of our race are yearly sacrificed, by reason of decayed timber.

Cincinnati could not credit the evidence of its own senses—that the little brass model before their eyes, weighing only eighteen pounds, could sustain a pressure of 5,000 pounds without deflection, and leave the extent of its capacity yet undiminished—the solid fact remained. The question to be solved was, if brass could thus defy deflection, what could be expected of iron.

Thus the great principle was evolved at a bound. An iron bridge could be so constructed, of two hundred feet span, to weigh thirty-five tons, where a wooden structure would require near two hundred and fifty tons. The one having none of its own weight to sustain, the other requiring more than half, before of any use. Then one was indestructible, the other easily liable to decay and crinking. These facts produced a startling impression in the minds of the public, and the conviction that the principle involved (viz., a tubular arch on which alone suspended the passing load, and not on the floor or chord of said arch) was all that could be desired.

Let any one take three strips of iron plate, and flange their edges so that they may be riveted together, producing an equilateral triangular tubular arch, select the very thinnest plates, and endeavor to deflect it if within his power. Let him try the same experiment with common sheet iron,

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

☞ Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

☞ FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

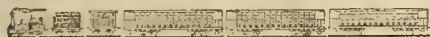
FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR S.W. MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio

LEW. & LEAVITT.

APPLEGATE & CO.,

Booksellers, Publishers, Stationers & Blank Book Manufacturers,
43 Main St. Cincinnati, O.

1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-16th,
Corby, Gossin & Co.'s make for sale very low by
TRABER & AUBERG,
7 Public Landing.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH 1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

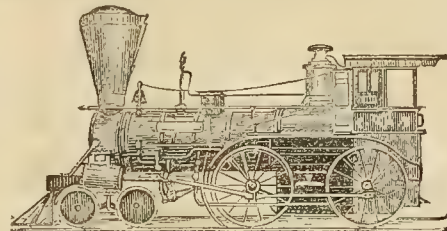
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

1858

1858.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars,

OHIO AND MISSISSIPPI

(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted.) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

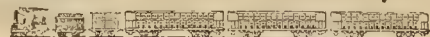
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BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

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Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.
7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

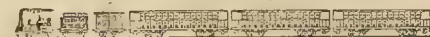
Leave Dayton at 8:05 A. M., 2:30 and 6:50 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

☞ For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even day.

☞ Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup't.
Racine, May 15, 1857.

my21

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PORTER, ROLFE & SWETT'S SUPERIOR RAILROAD PIKES, MADE OF "POMEROY IRON."

We have now in operation, at Pomerooy Iron Works, "Swett's" Celebrated Spike Machine, which makes, at ordinary speed, 2000 pounds of Hook Railroad Spikes per hour. Taking into consideration the form of the Spikes and the material used, we believe these Spikes cannot be surpassed. Iron men furnished with samples gratis. Spikes constantly on hand and for Sale. Also, a full assortment of the Pomerooy Rolling Mill Iron. Bridge Builders' orders for Iron and orders for Railroad Chairs filled at short notice.

Cincinnati, March 5, 1856.

L. F. POTTER, Manager and Agent.

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POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

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STEAM BOILERS and WATER TANKS of any size or description.

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WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

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Locomotive Works,

SCHENECTADY, N. Y.

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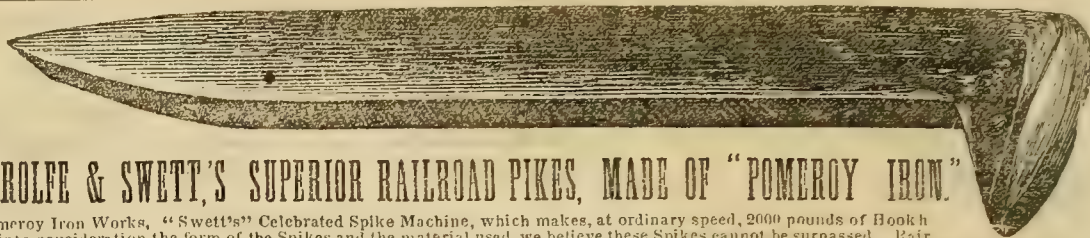
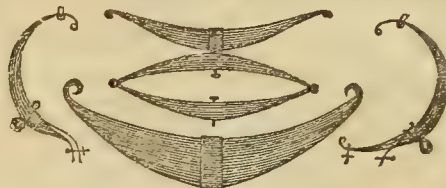
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AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Supt. Aul6.17MCDANIEL & HORNER,
LOCOMOTIVE AND CAR
MOTIVE SPRING

MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

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U. WELLS, R. R. Car Manuf. Petersburg, Va.

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May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

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Most Reasonable Terms.

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WILMINGTON, DELAWARE,Manufacturers of all kinds of Railroad
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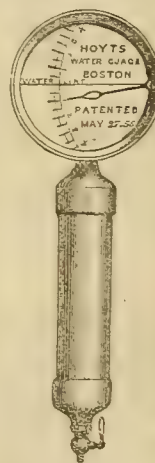
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From our long experience is car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

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We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. oc2

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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CHARLES W. COPELAND, Gen. Agent,
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RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents.

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No. 4 In preparation, same subject as No. 3.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, SEPT. 16, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

By WRIGHTSON & CO.

Office No. 167 Walnut Street

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LETTER FROM DR. FOWLKE.

MEMPHIS, SEPT. 10, 1858.

T. WRIGHTSON, Esq.,

My Dear Sir:—Advices from Texas all right. At St. Louis, stockholders evince willingness to do all, and more than what was suggested at Cincinnati and Louisville. All seemingly right at the South. I have entire confidence on reaching Marshall, Texas, of a satisfactory adjustment, promptly and at once.

* * * * *

I can and will protect every paying stockholder. You may give this assurance personally with perfect safety.

JEPHTHA FOWLKES.

We remark, that from our own knowledge, many of the delinquent stockholders are paying up their back instalments, and new confidence seems to be inspired in the enterprise by the open and manly course pursued by the President.

VOL. 6.—No. 30

ATLANTIC AND GREAT WESTERN R. R.

It seems to be fully settled, that this road has obtained a loan equal to its demand, and will, therefore, go on to completion. This is rather a surprise on the public; but, why it should be, we know not. The road has solid merits, and, as such, we have noticed it from time to time. If there are any who think that railroad construction is at an end; or, that because some companies fail, others are sound and profitable, they are very much mistaken. This country has about 27,000 miles of railroad; but it will have 100,000 miles before the railroad business is over-done. In the meantime, we should consider each undertaking on its own merits, and not fall into the delusion of believing, that the whole railroad system is tumbled down, because here and there a company has failed. The time is not distant, when the average profit on this whole 27,000 miles will reach seven or eight per cent., which is a very good profit in any business. At present, the average profit on all finished lines of road in the United States, is about 5½ per cent. This is not very bad. But, it certainly might be better, and it will be a great deal better, with a little more experience and economy.

The "Atlantic and Great Western" is an Ohio road, and since it is to be completed, it will be interesting to know something about it, with its probable advantages. In the *Record* for July, 1855, we gave a digest of the last Annual Report of this Road, we have seen. Since then, the great revulsion in railroad prospects has prevented the Company from obtaining the capital necessary to its completion, and little has been done. The "ATLANTIC AND GREAT WESTERN ROAD" extends from Olean, N. Y., through Franklin, Penn., to Warren, Ohio, and thence by Akron, Crestline, and Urbana, to Dayton. The entire distance will be nearly as follows:

In New York	10 miles.
In Pennsylvania	100 "
In Ohio	303 "

The last part includes the Dayton and Hamilton Road, which will probably become a part, by laying a third rail. The entire distance to Cincinnati from New York by this route, will be as follows:

N. Y. and Erie Railroad to Olean.	396 miles.
Olean to Ohio Line.	110 "
In Ohio	303 "
Aggregate	809 "

It is quite obvious, that if this line be finished, it will be unequivocally the best line to New York, and this fact is undoubtedly the real reason, why this Company has been enabled to obtain the loan. Taking into view that it is forty miles shorter than by Cleveland; that the Ohio part can be easier run, and that it is a broad gauge line through the whole length, it is quite obvious that it will become the preferred eastern line for at least a very large number of the passengers who now go by the way of Cleveland. These

consequences, it seems to us, would follow the completion of such a road:

1. The breaking up of the Erie monopoly, and this is the only route which can accomplish that.

2. Greatly enhancing the prospects and advantages of the New York and Erie Railroad. Indeed, to that road, it is vital; for it is the only profitable thing which can give it a most decisive advantage over the Central Road.

3. Conferring a great advantage on the Cincinnati, Hamilton and Dayton Road. Should this road be made one link in the Broad Gauge Route between New York and St. Louis, it will add, at least, fifty per cent. to its business.

4. To enhance also the value and position of the Ohio and Mississippi.

Indeed we think, that if ever a Broad Gauge line, on so direct a route as this between New York, Cincinnati and St. Louis, that it will be seen, at once, to have great advantages over any other route. This is so plain, that it is singular it has not been taken up and completed before this.

Having seen the nature and position of this undertaking, let us see what, if any, are the prospects of its completion. First, we have a statement (after many reasons,) which is apparently reliable, that this Company has obtained a loan in money, and iron, sufficient to complete it, or at least insure its success.

The New York *Tribune* says.

"An amount of £200,000 was taken in Paris by a prominent Spanish banking house, and about \$500,000 was subscribed in London by various parties. The iron purchase was for 31,000 tons, which makes up the sum total to upwards of \$3,000,000 as reported. The parties who have been engaged in the negotiation arrived by the Fulton, and bring a portion of the money subscribed with them, in the shape of Sterling Exchange."

The iron is probably sufficient to lay the entire line, and the money will nearly, or quite complete the grading. The cost of the Road (the Ohio part,) and the manner in which the grading has been carried on, is made known, according to the estimates of the Company, by their report of 1855. The Board say that from the Pennsylvania Line to Dayton is 243 miles, and the estimated cost as follows:

Graduation and Iron	\$5,404,760
Stations, Shops, Machinery, etc.	1,152,000
Total	\$6,556,760

At that time, the Company stated their means as follows:

Actual Subscriptions	\$1,860,494 72
Conditional Subscriptions	250,000 00
Rights of Way	50,000 00
Aggregate	\$2,160,494 72

If, as above stated, the Company have acquired means, in the recent negotiations, to the extent of \$3,000,000, they have absolutely a working capital equivalent to over

\$5,000,000. It is probable (indeed certain) that a part of the recent loan is applicable to the Pennsylvania part. To counterbalance this, the Road had, in 1855, a large amount of grading, and masonry already done. The small part in New York will doubtless be made on a branch of the Erie Road.

On the whole, it is probable the company will only need hereafter, an additional capital equivalent to the cost of their machinery.—We may, therefore, safely opine that the road will go on. We understand that the managers expect to finish it in eighteen months. They state that nearly two hundred miles are graded. In 1855, nearly eighty miles were graded, but in consequence of conditions in local subscriptions, by which the money was to be applied in special localities, this work was distributed in parts, so as to be unavailable. The contractor, Mr. Doolittle, seems to have advanced large sums, and to have been very energetic in advancing the work.

If our views of this enterprise be correct, it is really one of the great and important works of the day. It will make a decisive change in our Eastern business, and greatly aid the three other great roads.

LOUISVILLE AND NASHVILLE RAILROAD.

The work upon this important line of road which is to unite the Southern and Northern systems of railroads, is progressing very satisfactorily, giving promise that by the first of October, 1859, the whole will be completed.

In a conversation, some days since, with the Hon. James Guthrie, one of the active managers of the road we learned that by the 20th inst. cars would be running from Nashville to Gallatin, 26 miles north; and by the 15th prox., the track would be finished 74 miles south of Louisville, making 100 miles of the 185 miles constituting the whole line. Of the remaining 85 miles, at least two-thirds are graded and paid for.

The bridge across Green River is to be of iron, after the pattern of those on the Baltimore and Ohio road. It will be of five spans of 200 feet each, resting on substantial stone piers and abutments which will be finished early in November of the present year.

We are assured by those who have passed over the line of this road, that all the work is of the most substantial and excellent character, while the engineering reflects the highest credit upon Mr. McLeod and his assistants. But the most noteworthy part of the whole business is that the entire work thus far has been paid for in cash, amounting on the 1st of Sept., to \$3,770,000, and all without any debt save \$300,000 to the State of Tennessee.—This we believe unparalleled in the history of American railroading, and worthy of all commendation.

The estimated cost of the entire line, rolling stock, &c., is five and a half millions, of

which 3,600,000 have been subscribed and nearly paid up. The remainder is intended to be raised by a first and only issue of bonds, to the extent of \$2,000,000, at seven per ct. These bonds will be among the very best of our railway securities, as they will be upon a permanently finished, and perhaps the best line of road, for its extent, in the country.

The iron upon this road is all American of which 12,000 tons have been already laid or delivered. The monthly expenditures range from \$60,000 to \$70,000, all of which are paid for in cash, and we are assured that the company will continue to pay cash as long as the work is prosecuted.

The traffic over the finished portion of the road is already very large amounting in the aggregate to \$20,000 per month, which will soon be greatly increased.

The new depot at Louisville is 400 feet long and 136 feet wide, and will be completed this month, and will add greatly to the comfort of those doing business and traveling upon the road. The permanent offices, &c., will not be constructed at present, as they are not needful for the working of the road.

That this road will be one of the best paying road in the country, there can be no doubt. It can never have any competition that will prevent its securing remunerative prices both for freight and passengers, while the business to be done by it will only be limited by the capacity of the road. To Louisville it must be of incalculable advantage, opening as it does to her market, the extensive agricultural regions of Middle and Eastern Tennessee, Northern Alabama, Georgia and South Carolina, now almost entirely supplied by the Northern States. In this trade she will have no competition until the Danville and Knoxville road is completed, which will not be very soon, as Cincinnati, the only party interested seems to care a very little about it, and it is about to let Louisville secure the small portion now completed. It will therefore, be safe to say, that no road in the country has ever been opened with fairer or more certain prospects than this, or that in the end promise a better return for the money invested.

THE COMMERCIAL ASPECTS OF CINCINNATI.

Under this head we have been in the habit of noticing the Annual Commercial Statement of the Chamber of Commerce. It is prepared by the Secretary of the Chamber of Commerce, and is a remarkably correct and interesting document. In noticing the commercial events of the past commercial year—by far the most important was the bank suspension, with which the year commenced.

The failure of the Life and Trust Company was, indeed, a few days before the 1st of September (the date of the commercial year,) but at that time it was supposed to be an isolated case. Not so. The convulsion went

on, till the results followed, with which our readers are perfectly familiar. In the mania, the credit and capital of Cincinnati have remained unimpaired, and relatively to others, this city has escaped better than any other one in the country. Indeed, some branches of business have increased; but, the aggregates of imports and exports have diminished, but to nothing like the extent of New York, and other commercial towns (in consequence of overtrading,) the bulk of the storm burst. The aggregates of imports and exports in the last current years were as follows:

In 1856-7.....	\$132,732,317
In 1857-8.....	121,753,659

This is a diminution of \$11,000,000 in the aggregate. This is only about 8 per cent., and may be considered as a very small diminution.

The real position of Cincinnati commerce and its growth, may be seen by the comparative amounts of business during a series of years. We shall give some of them.

The following is a table of the total Imports and Exports since 1850, viz:

Years.	Value of Imports.	Value of Exports.
1851-2.....	\$41,256,199	\$33,234,896
1852-3.....	51,270,644	36,266,108
1853-4.....	63,730,629	45,432,780
1854-5.....	67,501,341	38,777,394
1855-6.....	75,295,901	50,744,786
1856-7.....	77,000,136	55,642,171
1857-8.....	74,348,758	47,407,095

There can be no doubt that, had the prices for the various articles been the same, the total value of the imports and exports the past year would have exceeded last year. We would state that these figures do not approximate to the value of the entire commerce of this place at all; all they show is the comparative increase or decrease, and are not of much use beyond this.

The total value of our imports can not be less than eighty-five million dollars, and of our exports than ninety millions.

The following are the Imports and Exports of Coffee at this place, for the last thirteen years, ending August 31, each year:

	Imports. bags.	Exports. bags.
1846.....	55468	16366
1847.....	50337	13057
1848.....	80242	18587
1849.....	74961	18909
1850.....	67170	22030
1851.....	91177	28153
1852.....	93732	46534
1853.....	109118	61122
1854.....	91425	46334
1855.....	114113	42283
1856.....	92066	37003
1857.....	102305	49094
1858.....	129129	68744

The Coffee trade at this point, it will be seen, has reached a very great magnitude. The importation, as above, amounts to *twenty millions of pounds*. It will be seen also, that the average amount of Coffee retained for consumption in the last five years is about 50,000 bags per annum; which is about *nine millions of pounds*. This is an enormous amount for the population of the city and neighborhood (including boats, etc.,) and corresponds with an opinion we have long entertained,

that this region of country consumed, in proportion, more Coffee, than any other in the world.

The SUGAR TRADE has also increased largely, with the following results.

The following table shows the Imports and Exports of Sugar, at this place, for thirteen years, ending August 31, each year :

	IMPORTS.		EXPORTS.
	bbls.	brls.	bbls.
1846.....	13710	4956	4162
1847.....	16649	7196	4998
1848.....	27153	11175	11359
1849.....	22685	7575	8443
1850.....	26769	13005	9650
1851.....	28068	18584	13000
1852.....	39224	15237	51360
1853.....	49239	24004	37615
1854.....	64461	25441	41119
1855.....	46903	19465	32422
1856.....	32761	16846	21736
1857.....	15900	21647	13370
1858.....	44976	46347	29142

These figures show an extraordinary increase, for here we find the remarkable fact, that we imported within less than two millions pounds as much Sugar, the past year, as we did both the previous years, showing how seriously the failure of the crop in Louisiana affected our trade in this article.

The Produce trade of the city has increased immensely in a few years, although in the mere articles of raw produce, this city appears to be behind two other western cities ; it is, however, only in appearance, for the produce trade of this city consists mostly in manufactured articles, such as pork, whisky, lard, soap, candles, etc. The results of genuine produce business may be seen as follows.

The following table shows the Imports and Exports of flour at this place for thirteen years, ending Aug. 31, each year :

	Imports.	Exports.
	bbls.	bbls.
1846.....	203319	194700
1847.....	512506	581920
1848.....	151518	101011
1849.....	447844	267420
1850.....	21839	9908
1851.....	482772	390131
1852.....	511042	402411
1853.....	440009	312841
1854.....	427464	232778
1855.....	342772	199276
1856.....	546727	569461
1857.....	483189	416789
1858.....	633318	609215

The following table shows the whole number of Hogs packed in this city, each year, for twenty-six years :

Years.	No.
1832.....	85000
1833.....	123000
1834.....	162000
1835.....	123000
1836.....	102000
1837.....	182000
1838.....	190000
1839.....	95000
1840.....	160000
1841.....	200000
1842.....	250000
1843.....	240000
1844.....	390000
1845.....	350000
1846.....	250000
1847.....	475000
1848.....	410000
1849.....	260000
1850.....	330000
1851.....	350000
1852.....	350000
1853.....	360000
1854.....	420000
1855.....	355796
1856.....	403296
1857.....	344512
1858.....	446677

The exportation of Whisky declined in the past year ; partly, because so much is no

longer required to make French Brandy ! Still the quantity was more than double that of 1850.

The following table shows the Imports and Exports of Whisky, at this place, for thirteen years, ending August 31, each year :

	IMPORTS.	EXPORTS.
	brls.	bbls.
1846.....	178336	13320
1847.....	186639	184928
1848.....	170476	186509
1849.....	165419	136111
1850.....	180573	179440
1851.....	344047	231324
1852.....	319488	276124
1853.....	327110	257616
1854.....	309245	249619
1855.....	30565	243551
1856.....	49001	32434
1857.....	531673	361889
1858.....	412490	268226

The coal trade is a very important one to the manufactures, as well as the comfort of the city.

The total quantity received, as reported by the measurers, is 13,318,000 bushels. There was a good deal came into the city by Railroad and otherwise, of which we have no account, so that we may put down the entire receipts, for the season, at 14,500,000 bush.

The receipts for a series of years, stand as follows :

1852-4.....	8,138,000 bush.
1851-5.....	10,330,000 "
1850-6.....	7,570,000 "
1849-7.....	14,500,000 "
1857-8.....	15,000,000 "

THE STUDY OF THE NATURAL SCIENCES.

No branch of human knowledge is now commanding so much of public attention as the Natural Sciences. Geology, Mineralogy, Conchology, Zoology, all have their devoted students, who are prosecuting their labors with unremitting zeal. For a time, the skeptical in religion thought they had found, in these sciences, an impregnable fortress. But now the Bible men are, everywhere, rallying to the rescue ; and, with a fervor equal to their faith, are examining the field of nature to find evidence that must lead the mind up to nature's God. We are pleased to see that the work has been successfully commenced in this city, and that an extensive collection is likely to be made. Those of our readers who have visited the Mechanics' Institute are surprised to find six or seven thousand species in Conchology, with a number of fossils and minerals illustrating the geology of the United States ; and all brought together by the unaided exertions of a single individual, without the advantages of wealth. We refer to this subject to say, that we have much gratification in being able to state, that the young men of the city, encouraged by some men of wealth, are taking active steps to add to the collection ; and that, already a contract has been made, with an English scientific gentleman, for all the fossils of Great Britain. To this will be added, in due time, all those of the Continent ; and, also, the minerals and birds in general.

We can not but express our gratification

at this movement. Such a cabinet is greatly needed, as a means of mental and moral culture for the youth of the city, and as a place of fashionable resort, to while away a leisure hour. Whoever will step forward and secure the accomplishment of this great work, will erect a monument to his memory as imperishable as the works of God, which he will thus store up for the benefit of coming generations.

OUR WESTERN TERRITORY—THE CENTRAL PACIFIC ROUTE.

The following paragraph, from a Memorial sent by the people of Kansas city in favor of the Central Pacific Railroad route, contains some interesting facts, although one sided :

The settlement of Kansas Territory within the past three years, is sufficient evidence of the capacity of the eastern slope of the mountains, when we state the fact, that the act erecting Minnesota into a Territory, bears date in the year 1849, and the act creating a Territorial government in Kansas bears date 1854, and she is now applying for admission, side by side with Minnesota, as one of the sovereign States of the Confederacy ; while Nebraska on the North, with three times her territory, and New Mexico on the South, twice her size, and with a settlement that dates back to the time of the Spanish Conquest, are yet dependencies upon the bounty of the Federal Treasury. You have also before you the petition of the people of Carson Valley for a Territorial Government, and the statistics of its population, which discloses the fact that a powerful nucleus for a State is already in existence, in a locality where previous to their petition, such facts were unknown to a greater portion of the people of the United States, so rapid has been the tide of settlement. Already have the people of California began to consider the question of building a railroad to this valley. East of this, upon the eastern rim of the Great Basin, is the city of the Great Salt Lake, which, with its tributary country, is already dense enough in population for a State Government. These Mormon settlements extend throughout the valley of the Great Basin, in a country unsurpassed for the mildness and salubrity of its climate, and for the production of all the cereals necessary for the support of man. We state what our annual experience and annual trade demonstrates, upon our counting-house books, that there are not seventy-five miles of country between the 37th and 40th parallels that is not now the habitation of the white man, and where settlement has not penetrated and fixed its never relaxing grasp upon the soil. These facts we conceive to be of the first importance in a great enterprise like that of the Pacific Railroad. We know that throughout this whole extent of country, from the waters of the Missouri to the Sierra Nevada, are to be found white men living ; that along it cluster the great Indian tribes of the American continent ; that here is to be found the buffalo, the antelope, the horse, and all descriptions of game and fish, upon which the Indian subsists. It is on this route his permanent villages are fixed, for it is here he finds his food, fuel to prepare it, water to drink, timber to shelter him from the blasts of winter and from the hot suns of summer, and grass for his stock. These do not exist to the south, on the burning sands

and arid wastes of the great deserts, and there the Indian is never found, except in roving bands in search of plunder upon the more southern valleys of Mexico. There are not twenty miles on the whole route that the iron horse can not drink from living streams of purest water. In proof of this we can only cite the fact, that our ox teams traverse it annually, without loss, taking out our wares, and bringing back in return the robes, furs, and skins, obtained from the wild tribes of the Sierra Madre, and the trappers and hunters of the Great Basin. Where we can employ the ox in commerce, science and engineering can employ the iron horse; and where the ox finds water and sustenance, surely the locomotive can subsist. We wish not to decry other routes, but we merely ask a comparison between this fact, and that stated by Lieutenant Beale, in his recent report. When speaking of the capacities of the camel for endurance, he says: "They carried the water for the mules for *six days*, without tasting a drop, and were in good condition at the end of that time." Yet the opponents of the central route point triumphantly to the last exploration of Lieutenant Beale, as conclusive in favor of their route. They seem to forget that Beale had two objects to attain—a railway route and the success of the camel experiment. But, unfortunately for them, his railway notes and his camel eulogiums are based upon entirely different data. The country that suited a railroad did not develop the camel, and we have its topography in glowing colors—but the country in which the camel exhibited his peculiar powers of abstinence and wondrous endurance, was not the route of the iron horse; and we have, instead of curvatures, gradients, and equated distances, the field notes of the dromedary, and his ability to subsist upon the hardest, bitterest and scarcest shrubs, that a torrid sun and drifting sands could produce.

TENNESSEE AND ALABAMA RAILROAD.

The work of construction has progressed during the year ending June 30th as rapidly as circumstances would admit, and between Thompson's Station and Columbia the grading and masonry is in a state of forwardness that warrants the belief that the track can be laid to Duck River in December next.

At all points the grading is well advanced, particularly toward the end nearest the completed road, and the heavy cuts along Rutherford's creek and near Duck River, will be taken out by the time the track will reach them.

Most of the culvert masonry is finished. Eighteen bridge abutments are completed out of twenty-two in all, and all the bridge piers are done.

The line of the road follows down Carter's Creek four miles to its junction with Rutherford's Creek, and down the latter nearly to Duck River, crossing Carter's Creek nine times and Rutherford's Creek four times, all the latter crossings being within a distance of onemile. Of the nine crossings of Carter's Creek, five are bridges, while at four the creek is turned and bridges avoided. The four crossings of Rutherford's Creek are bridges, and one bridge six hundred and twenty-seven feet long carries the Railroad over Duck River.

From the number and size of these structures, it was deemed most economical to build them of the best material at command; for

a bridge of sufficient strength, if properly built of good timber, can be used for fifty years, while an inferior one, costing nearly as much, will not last one-fifth the time. The best quality of white pine and oak has been obtained, and unusual care and pains will be taken in framing and putting them up.

The cross ties are contracted for sufficient to lay the track to Duck River, the principal part of them being furnished of red cedar by Hon. Broomfield Ridley by way of the Nashville and Chattanooga Railroad.

As yet no movement has been made toward ballasting beyond the point where it terminated in 1854, but it can be very rapidly and economically done after the track is laid, and should be proceeded with during the coming fall and winter. The security of the trains and proper working of the road demand it. The results on the finished road, running nearly three and one half years, are sufficient to show its utility.

The amendment to the charter of this Company by the last Legislature and its acceptance by the stockholders, render it necessary to build the road by way of Columbia, and increase the distance to Mount Pleasant over the former route three and one quarter miles. The Central Southern Railroad Company had partially constructed the road bed over the most eligible route from their former junction with this road into the town as a part of their main line, and the result of negotiations between the two Companies has been the sale of two miles and 1040 feet of the road of the former to the latter, including the right of way where obtained, and the undivided one-half of grounds provided by the C. S. R. R. Co. for station grounds in the town. By using them in common they will be ample for both and more convenient than two separate establishments. An objectionable feature in the section of road transferred is a grade of sixty-eight feet per mile, while that of the Tennessee and Alabama Railroad is fifty feet per mile, but it is so short as to be but a small obstacle to economical working.

Between Columbia and Mt. Pleasant the work is in a fair state of forwardness, and can be ready to commence laying the track upon it by the time the rails are down to Columbia. The iron is all purchased to complete the road to Mt. Pleasant, and enough to lay between six and seven miles has already been delivered upon the road.

Three new locomotives are provided, and will be received during the winter and spring, in time to take their places in the trains when the road is completed, to Columbia and Mt. Pleasant, in addition to the one put upon the road during the past year.

One box car has been added to the number on hand at the last report, and six new platform cars are building and will be received about the first of September. A considerable addition to the number of freight cars and one or two passenger cars should be provided during the next winter and spring. It is also advisable to provide a few dirt cars for the repair force, which now operates to a disadvantage for want of them.

The expenditures for the year ending June 30th, 1858, on account of constructions, have been \$222,369 28.

Track-laying will commence about Aug. 1, and will progress so that the road can probably be opened for business as follows:

To Duck River in December next.

To Columbia in March, 1859.

To Mt. Pleasant in June, 1859.

The distance from Broad Street Depot, Nashville, to the following points, will be:

To Thompson's Station.....	28 4 10 miles.
" S ring Hill.....	22 2-3 "
" Dork's Mill.....	39 "
" Santa Fe Turnpike, N. side Duck river.....	42 "
" Columbia.....	45 8 10 "
" Mt. Pleasant.....	57 1-2 "

To J. H. Devereux, Division Engineer, P. H. Thompson and S. W. Steele, Division Engineers, and their Assistants, the Railroad Company are indebted for their industry and ability in carrying forward the work of construction.

The gross earnings for the year, are:

From transportation of Passengers.....	\$37,554 54
" " Freight.....	17,169 45
" " Mail.....	375 00

Total Earnings.....\$55,199 99

Expenses were.....\$35,679 28

Deduct for expenses 1856—
Wood and material on hand.....2,795 55

Total expenses 42 per cent.....\$23,083 73

Leaving a balance of net earnings 57 per cent, \$32,015 16

The receipts compared with last year show an increase, while the expenses have been lessened. They are certainly gratifying, when we remember the failure last year of several articles that usually add most to our freight receipts and the monetary panic that pervaded the whole country, thereby cutting off largely from what would have been our passenger receipts.

If the receipts had only been as much as the year before, instead of being increased, certainly all would have been more than satisfied.

Many items in the expense account ought not to be charged to that account unless a credit was given for the improved condition of the rolling stock. Nearly all the cars and locomotives, (except the Nashville,) have been upon the track since the first train was started over the Road, and notwithstanding the heavy business they have had to do, both the cars and the locomotives are now in nearly as good condition as when they started, repairs having been promptly made so soon as needed, believing it to be an economical outlay of money, to keep the rolling stock and machinery in good repairs, instead of having to replace them with new.

Two of the bridges, one over Little Harpeth and the other West Harpeth, have been lately repaired, both requiring several new pieces of timber to supply the place of those that rotted from exposure to the weather unprotected, which will be the case every few years, unless the timbers are covered with something to exclude the water. The trussel work in Nashville is in good condition and safe.

The repair force has been lessened nearly one half, and less price has been paid for those now in the employ of the Company, and if the road was thoroughly ballasted I am satisfied that one hand to every three miles would be sufficient to keep the road in repair.

On account of the inferior quality of the large English rail on a part of the track, we have been compelled to take up about 45 rails and put down others in their places. No rail of the American iron has yet given way in the least. I think the American far superior to the English rail.

I would respectfully suggest the great necessity of erecting suitable buildings at the depot on Broad street, in Nashville, so soon as means can be spared for that purpose.

A new round house, or an addition to the old one, must of necessity be built to protect our locomotives.

I can not speak too highly of the manner in which the officers, agents and employees of the department under my charge have performed the duties of their respective positions—always cheerful, prompt and efficient, they deserve the thanks of the Company.

Statement of Receipts and Disbursements by the Treasurer of the Tenn. & Alabama R. R. Company, for the twelve months ending June 30th, 1858.

RECEIPTS.

Cash on hand June 30, 1857.....	\$4,820 30
" of Stockholders.....	6,418 34
" of Broad Street subscribers.....	539 70
" of New Subscribers.....	1,526 61
" of Maury Subscribers.....	18 92 75
" of Bills payable.....	243,529 40
" of Transportation.....	54,614 53
" of State Bonds.....	74,441 25
" of Company Bonds.....	33,900 00
" of Davidson Bonds.....	11,240 10
" of Real Estate.....	1,917 46
" of Sundries.....	65 87
Total.....	\$451,274 94

DISBURSEMENTS.

Cash paid to Construction.....	\$145,766 49
" " Bills payable.....	213,400 39
" " State Coupons.....	20,758 50
" " Transportation.....	31,951 38
" " Engineering.....	8,969 83
" " Land Damages.....	8,997 02
" " Station Grounds.....	2,227 65
" " Company Coupons.....	1,645 41
" " Personal Damages.....	1,631 92
" " Stock Damages.....	367 25
" " Track and Equipment.....	3,371 46
" " Real Estate.....	521 61
" " Agencies and Salaries.....	2,546 00
" " Stockholders.....	262 10
" " Expenses.....	2,325 98
" " Loss, Counterfeit, etc.....	75 65
" on hand June 30, 1858.....	9,554 30
Total.....	\$451,274 94

Floating Debt.....	\$83,037 01
Including Depot Grounds.....	\$36,645 00
" " Land Damages.....	475 00
" " Company Bonds.....	8,250 00
Total.....	\$45,370 00

Bonded debt—State Bonds.....	\$771,000 00
" " Company Bonds.....	46,000 00
Total.....	\$817,000 00

Planters' Bank debt—State Bonds.....	\$115,000 00
Manhattan Co. Bank Debt—State Bonds	
pledged.....	50,000 00
Bonds on hand—State Bonds issued.....	\$31,000 00
" " do, not issued.....	43,000 00
Bonds on hand—Co. Bonds.....	32,000 00
Total.....	\$455,000 00

When the 43 State bonds now due to the Company, but not issued, are received, the bonded debt will be as follows:

State Bonds received.....	\$771,000 00
" " not received.....	43,000 00
Company Bonds.....	46,000 00
Total.....	\$860,000 00

☞ The Receipts of the Illinois Central Railroad, for August, were:

First week.....	\$81,144 37
Second week.....	38,970 13
Third week.....	61,268 59
Fourth week.....	65,116 91
Total for the month.....	\$196,500 00

☞ The Earnings of the Chicago, Burlington and Quincy Railroad Company, for August, were:

Freight.....	\$75,028 74
Passengers.....	28,445 54
Mail and Miscellaneous.....	1,513 07
Total.....	\$104,987 35
Operating expenses.....	60,000 00
Net earnings.....	\$44,987 35

☞ The earnings of the New York and New Haven Railroad for August, 1858, were \$72,720 52, against \$96,984 54 in August of last year.

WESTERN RAILROAD OF NORTH CAROLINA.

The annual meeting of the stockholders of this Company was held at Fayetteville, North Carolina, March 15th and 16th, 1858. The report of the President and Directors was submitted, as were also the able reports of the Chief Engineer of the Company and Dr. E. Emmons, the State Geologist.

The officers of the Company for the ensuing year, are: *President*—Chas. B. Mallert; *Secretary and Treasurer*—John M. Rose; *Chief Engineer*—William A. Kuper.

The line of the Company, as projected, extends from Fayetteville, on the Cape Fear river to a point on Deep river,—a distance of forty-three miles. The last named terminus is situated in the great iron and coal field which borders on Deep river, and in the transportation of these two staple productions of coal and iron, the Company expect to control a great traffic. The amount subscribed to the Capital Stock of the Company is as follows:

By the town of Fayetteville.....	\$100,000 00
By the County of Cumberland.....	100,000 00
By Individuals.....	141,272 19
Total Capital Stock.....	\$341,272 19

The following statement from the balance sheet of the Company, shows the condition of the Company's finances at the date of the annual meeting:

Received from Stock collections.....	\$290,212 62
Interest on Town Bonds and Rents.....	6,197 75
Bills Payable, including notes given for iron.....	64,762 78
Total.....	\$361,072 15

There has been disbursed the following:

On Construction, Engineering and contingencies.....	\$136,373 99
For Right of Way and Depot Grounds.....	13,746 60

Assets on hand:

County Bonds.....	\$18,800 00
Planck Road Stock.....	4,700 00
Town Bonds.....	87,000 00
Bills Receivable.....	6,750 00
Bonds guaranteed by the State.....	54,510 10
Cash.....	1,528 70
1000 tons Railroad Iron.....	40,675 46
Total.....	\$361,072 15

The sum charged to construction account has been expended on the line near Fayetteville. During the year the work of construction has progressed with a degree of activity commensurate with the Company's means. The graduation of 25 miles is contracted for, and on the first thirteen miles from Cape Fear river, eight tenths, of the work completed. All the cross-ties for the first thirteen miles have been contracted for, and the iron, chairs, spikes, and the necessary fixtures for turn-outs, turn-tables, etc., purchased. The track laying of this distance was to commence in May, 1858, and it has been the intention to have thirteen miles completed and open for business Aug. 1. On the remaining twelve miles the work is being prosecuted with sufficient force to insure its completion by the 1st January, 1859,—an additional seven miles can be made ready for the superstructure by the 1st of October.

A proposal was made last Fall by responsible contractors to execute the grading on the remaining eighteen miles of road to Deep River by the 1st of January, 1859, payments therefor to be two-thirds cash and the balance in first Mortgage Bonds, but your Board finding that the existing contracts for grading and to put in operation at least thirteen miles of road would absorb all the available means of the Company—it was not accepted. This fact is to be regretted. It is to be hoped that now the work has so far progressed by the

noble efforts of the few, it will receive aid from all who are to be benefited by its construction—the burdens equalized—and its completion insured at an earlier day. Could this be anticipated during the present year, but to an amount sufficient to complete the grading to Deep river, the engineer might safely predict the final completion of the road by Jan. 1, 1860.

The maximum degree of curvature adopted in the location of the line was three degrees, or a radius of 1,910 feet; but on account of difficulties attending the right of way through Fayetteville, it had to be exceeded in three curves of 4°, 5°, and 8°, for an aggregate distance of 1703 feet. In view of the retarding effects of this curvature, the Engineer has so arranged the grades on them that a locomotive with its maximum load will traverse, going in either direction, with as much facility as on other parts of the line. The number of degrees of curvature on the whole line is 936½ or an average per mile of 21 78-100 degrees. The aggregate length of tangents is 34 miles 4440 feet, or a fraction over 80 per cent. of the distance. The maximum grades opposing the trade is 41 2-3 feet per mile. On these a locomotive weighing 20 tons, with its whole weight made available for adhesion, can haul a gross load of 336 tons, or deducting from this four-tenths, the proportion of dead weight, a net load of 201 6-10 tons; and returning haul over the opposite grades of 63½ feet per mile, its train of empty cars and 60 4-10 tons of freight besides, or a gross load of 195 tons. The elevation of the highest summit crossed above the initial point is 345 feet. The difference in the level of the water in Cape Fear and Deep rivers, is 181 9-10 feet. On the plan and manner of constructing the line we extract the following from Mr. Kuper's report:

"The road way in excavations is 18 feet wide, and on embankments 12 feet. The slopes in excavations vary from ½ to 1, and for embankments 1½ to 1. In borrowing materials for the formation of embankments, contractors are required to do so from one side of the excavations, provided the haul is not over 800 feet. If taken from pits, a berm sufficient to cover the ground for a double track is left, which is also required where materials are wasted from an excavation. All the bridges on the line are to be built of wood of the best description, and are to be properly protected from the weather. The most important are at Lower L. River, 200 feet, and Upper L. River 100 feet long—the aggregate length on the whole line being but 350 feet. It is gratifying to be able to state here, that my apprehensions relative to being able to procure stone of a suitable character for the abutments and piers, as well as for all the culverts on the line, other than those contemplated of brick and iron, have been removed, quarries of stone having been lately discovered, sufficiently near to their respective locations, as to render it available for that purpose, at a reasonable cost. All other works connected with and appertaining to the graduation and not herein particularly noticed, are to be built in a substantial and workmanlike manner.

"The superstructure of the Road is formed with a rail of the T pattern of 52 lbs. per yard, laid on cross-ties 8 feet long, and hewed to a thickness of 6 inches, placed 20 inches from center to center, and firmly bedded; the joints of the rails are confined by a wrought iron lipped chair, weighing about 7½ lbs. With the track thoroughly drained by ample side ditch-

es and properly ballasted, it will give a permanent roadway. As it might be questionable with your Board whether the rail proposed above, would possess sufficient strength and durability for the heavy tonnage of your road, and that a rail weighing not less than 60 lbs. per yard would be required, I have carefully considered the subject of rails, and my conclusions, derived from theory and practical observations, are, that economy, permanency and durability of track and rail, is not dependent upon increased weight of rail alone, but to the frame of the track and form of the rail."

The engineer demonstrates his theory by submitting some practical facts of interest in the use of rails on the New York and Erie and Reading roads.

The following is the Engineer's estimate of the cost of the whole road, including equipment, etc.:

Graduation, including bridges.....	\$314,323 56
Superstructure, with turnouts and contingencies.....	300,113 33
Depots, water stations, ships and fixtures.....	65,000 00
Engineering, salaries and land damages.....	30,000 00
Equipment.....	270,500 00
Three miles additional roadway.....	45,000 00

Total cost.....\$1,025,016 89

Or \$22,282 97 per mile. In the estimate of equipment there is included twelve locomotives and 500 coal cars, and in the total cost of the line, the work already done is included.

The quantity and quality of coal and iron on Deep River, are fully set forth in the report of Prof. E. Emmons, made pursuant to instructions from the Governor of the State in 1857. The coal field is reported to possess all the essential characteristics of the better developed ones in this country, though its extent or area is comparatively small. The coal which is of bituminous and semi-bituminous qualities, exists along the course of Deep River for about thirty miles, and is rarely more than a mile from it. The late Prof. Johnson gave a favorable account of the coal, entertaining no doubt of its high heating as well as reducing properties, when employed for smelting the ores. The coal possesses 34.8 per cent. of volatile matter; 63.6 per cent. of fixed carbon; 1.6 ashes, and 1.3 specific gravity. Five kinds of iron ore belong, geologically, to the Valley of Deep River, of which the black band is the most important and valuable. A full statement of the composition, etc., is given in Mr. Emmon's Report.

A LETTER FROM A DIRECTOR.

The following letter which we find in the *Tyler Reporter*, is from a highly intelligent member of the old Southern Pacific Railroad Company.

MARSHALL, June 16, 1858.

My Dear Sir:—Enclosed I send you a slip from the New Orleans *Picayune*, giving the late action of the Southern Pacific Railroad Company in the election of Directors and Officers of the Company. Resolutions were passed for the immediate removal of the Office to Texas, in compliance with the law of the last session. The officers, with the books and papers of the company, arrived here on Sunday last, and we have opened a regular office for business. Dr. Fowlkes and Col. C. S. Todd are here. The latter gentleman will make his permanent home on the line of road.

About three-fourths of the stock was represented at the meeting in New Orleans, and

the utmost harmony prevailed. The stockholders everywhere denounce the late sale under the deed of trust, the most eminent counsel in the United States declare it a fraud, and that no legal rights vest under it; and acting under their advice and in defence of their rights, the stockholders have determined to resist it, and to prosecute to the utmost extent of the law this new combination for the damages which the company have sustained. Whether the new organization can defend themselves against such a large and influential body of men, located as they are in every State and City of the Union, and against the moral sentiment and the press of the country, and, in fact, whether they can explain to the satisfaction of the people of Texas the circumstances by which this sale has been consummated, I leave for your determination. The result of this sale, if sustained, must prove disastrous to every railroad enterprise in our State.

You know my position. I have been as bitterly opposed to the mismanagement of this company as any man in Texas, and in my many conversations with you at Austin, you will recollect that I neither attempted to explain nor defend anything that was wrong. Under the late act of the Legislature, locating the office in Texas, it is in the power of the people of Texas to purge and purify the company, and place its affairs in a sound and healthy condition. Every well-wisher to the enterprise and to the State must desire this. I have therefore to say to you, that, in consequence of the effect of the late sale, the action in New Orleans was one of emergency. It was impossible to tell who in Texas, under the circumstances, would be the most suitable for the position of Directors, and we had to do the best we could. As for myself I accepted, at the urgent solicitation of the Kentucky stockholders, many of whom were my personal friends—whose just rights, as I conceived, were being sacrificed. I can not remain, for the reason that my own private affairs demand my entire attention. Several of the Directors selected for Texas were intended to be temporary, and to be supplied by the Texas stockholders in different localities. I would be obliged to you, therefore, if you would see those in your locality and get them to nominate one or more gentlemen of character and integrity, to be elected to fill the vacancy which will be made immediately. Dr. F. will resign his place as soon as the company is placed in a correct position; at least such is his desire. It is the design and intention to place the company under the direction of the Texas people, and if we do not avail ourselves of the opportunity to vindicate the interests and honor of our State it will be our own fault, and I shall feel at least that I have performed my duty.

You may say to all your friends, that the most eminent counsel agree in the opinion that the sale will be set aside, and the rights of the stockholders sustained; that the stockholders of the road are everywhere aroused to the conviction that the only salvation of the company is to pay off all its legitimate debts, and to place its direction in the hands of men whose character for integrity and business habits and capacity will inspire confidence.

All useless agents and large-salaried employees have been cut off, with many other wholesome regulations per resolutions of the new Board, which are to be seen on the proper books of the company, and open to all stockholders at their office in this city. I wish you would come over here and exchange

views, when you will find many of your valuable suggestions made at Austin last winter have been by the new Board carried out.

Very truly your friend,

THOS. B. LINCOLN.

Hon. E. E. LOTT, Starville, Smith Co. Tex.

[From Newton's London Journal, April, 1858.]

ON AN APPARATUS FOR THE PREVENTION OF SMOKE IN STEAM BOILER AND OTHER FURNACES.

BY MR. WILLIAM B. JOHNSON,

Although it is generally admitted by those using steam boilers, that introducing cold air for the prevention of smoke may be made to effect that object, yet there is a general impression that this is effected only at the expense of a loss in the consumption of fuel. The object of the present paper is to show that smoke from steam boiler and other furnaces may be prevented with an economy in fuel, instead of causing a loss; and the experiments made by the writer, described in the present paper, appear to prove satisfactorily that, by judicious arrangement, cold air may be admitted into the furnace, so as actually to prevent the production of smoke, and at the same time cause the gases given out from the furnace to produce a more intense heat in their combustion, and to that extent economize the consumption of fuel.

The air, to be most effectual for the prevention of smoke, should be admitted in such a position relative to the furnace as to cause the whole of the products of combustion to come under its influence; and it should be admitted also in such increased or diminished quantities as the varying amount of gases produced may require.

The boiler to which the apparatus described in this paper is applied is of the multitubular construction, a form that presents more difficulty to the prevention of smoke than the various kinds of flue boilers. This boiler is of 30 nominal horse power. The shell is 6 feet diameter by 14 feet long; the furnace is 2 feet 10½ inches diameter by 12 feet long, and is attached to the fire chamber, 1 foot 8 inches long; there are 35 tubes, 3¼ inches diameter, leading from this chamber. The fire-grate is 7 feet long, and the top of the bridge is 9 inches from the top of the furnace, and is level across the top.

Between the shell of the boiler and the top of the furnace is fixed a vertical wrought iron tube, 7 inches diameter inside; this is placed directly over the furnace bridge, and through it air is admitted to act upon the products of combustion passing from the furnace over the bridge. On this tube is placed a self-acting apparatus, by which the admission of air is regulated. It consists of an outer casing, which surrounds a cylinder containing water, leaving an annular space, down which air passes to the tube. Projecting upwards from the center of the cylinder is a guide rod, which receives a floating cylindrical chamber, closed at the top by a plate, which forms a valve cover to the annular air spaces. An opening is made in this plate, to receive a regulating valve, by which air is allowed to escape from the floating chamber, and thereby diminish its buoyancy.

The action of the apparatus is as follows: When the furnace door is opened for firing, a chain, attached to it and passing over pulleys to a bell-crank lever connected to the cover of the valve, lifts it, together with the air chamber, above the surface of the water con-

tained in the cylinder. When the furnace door is shut, the valve cover falls, until the air retained in the air chamber causes it to float upon the water, in which position air is allowed to pass down to the furnace. The regulating valve is adjusted by means of a small screw, so that the valve cover may close or rest upon its seat in five or ten minutes time, more or less, as may be required by the mode of firing adopted, and thus stop the supply of air to the furnace.

The advantages of this apparatus are considered to be, that the air, being admitted in a downward direction, does not heat the flame against the furnace plates and injure them, as is the case when it is admitted in an upward direction. The opening for admitting air can not be choked up with dust or ashes from the furnace. Air is admitted at a part where the whole of the products of combustion are compelled to pass, and where they are most concentrated. The supply of air gradually diminishes from the time of firing, and ceases altogether when the supply obtained through the fire-grate is sufficient to produce complete combustion. The furnace fitting are as simple as those of an ordinary furnace, and therefore are not more liable to get out of order. The self-acting valve for admitting air is simple in construction, no packings or accurate fitting being required; and the apparatus is worked by the firemen without any extra duty whatever beyond that required for an ordinary furnace.

The results of the experiments made with this apparatus applied to the boiler described, have proved that smoke was effectually prevented by its use. During the experiments, the process of combustion of the gases was observed through an opening made in the back chamber; and it was found that, immediately after firing, a dense black smoke was produced if the valve was closed, which was instantly replaced by a light white flame when the valve was opened, and so continued as long as the valve was opened to its proper extent; but if closed too soon, as was frequently done for experiment, dense black smoke was again produced. Similar results were observed at the chimney top, except that the transition from dense smoke to no smoke was not so instantaneous as in the chamber, on account of the length of flues to be traversed before reaching the chimney top.

A pyrometer has been attached to the boiler, for the purpose of ascertaining whether the use of this smoke prevention apparatus was attended with an increased production of heat; and numerous experiments made with it confirm the view that a proper supply of cold air is attended with considerable increase of temperature, particularly immediately after the furnace is supplied with fuel.

Mr. Johnson showed the pyrometer that had been used in the experiments, with the regulating cylinder at work, and explained their action. He observed, that the general fear of proprietors of steam boilers that smoke prevention involved a waste of fuel caused a great impediment to the carrying out of smoke burning; and the present apparatus had been devised to meet this difficulty, since waste of fuel was not a necessary accompaniment of the principle, but simply showed a defect in the mode of carrying it out. The object of the pyrometer was to test more fully the result of the apparatus in economizing fuel. The alternate experiments of opening and shutting the air valves always showed a

rise of temperature after firing whilst the valve was open, which appeared conclusive evidence of improvement in the employment of the fuel, more heat being generated by the consumption of the same fuel, in consequence of its more perfect combustion.

The Chairman said he believed it was generally admitted that the additional supply of air to consume the smoke could be introduced without loss of temperature if properly regulated; but the difficulty was to make the apparatus self-acting, and to insure it from getting out of order. The object might be effected without apparatus, by sufficient care in firing; but it was impracticable to obtain the constant care requisite on the part of the men. The plan described appeared to be well contrived for the purpose, from its simplicity of construction and working, and the principle of action was certainly a good one; it was similar to that of a plan described at a former meeting by one of their members, in which the air was admitted through a regulating apparatus in the fire-door.—*Proc. Inst. Mech. Engineers, London.*

NORTH-EASTERN (S. C.) RAILROAD.

A meeting of the stockholders of this road was held at the Hall of the Bank of Charleston, on Friday, 27th August, 1858.

The President read the report to the stockholders, of which the following is an abstract:

At the annual meeting on the 7th of April last, the following resolutions were unanimously adopted:

Resolved, That the Board of Directors are authorized, if they deem it expedient, to issue 6,000 additional shares of the stock of the Company, on which a semi-annual dividend of two dollars per share shall be guaranteed, the said stock not to be sold under its par value of fifty dollars per share.

That this company shall have the privilege of redeeming or renewing the said stock at a rate not above par, at the expiration of fifteen years from the date of its issue.

That the holders of the preferred stock shall have the privilege of converting the preferred stock into the regular stock of the Company, and the said Board of Directors are further authorized to place in the hands of three appointed Trustees the second mortgage and bonds already issued, as collateral security, to such persons as shall become the purchasers of the said stock.

The Board had found it impossible to dispose of these bonds at a fair value, although they were able to use them as collateral securities, upon which loans, endorsements, and materials could be obtained. From the fact of the first mortgage upon the road being only for \$700,000, and the second for \$300,000—making a total of \$1,000,000 upon its cost, which, when fully completed and equipped, may be assumed at \$2,000,000—it seemed reasonable to rely upon their early sale, and the settlement of the indebtedness for which they were pledged. But in this expectation they were disappointed, and recourse was then had to the expedient of issuing a preferred stock as above described.

The advantage of this measure to the Company was, that it would enable them to fund \$300,000 of their debt.

The sales have only, thus far, been \$51,750, and, consequently, the Board have been greatly disappointed in their expectation of meeting the indebtedness for which these second mortgage bonds were pledged.

The first mortgage upon the road was for \$700,000, covering 1,400 bonds of \$500 each, of which there are unsold 358, at their par value of..... \$179,000
And pledged for the payment of..... 140,300

Showing an excess over indebtedness of..... \$38,700
The second mortgage was for \$300,000, covering 600 bonds of \$500 each, of which 14 have been sold, 145 have been deposited with the Trustees of the preferred stock, issued and to be issued—leaving 441 bonds unsold, at their par value of..... 220,500
And pledged for the payment of..... 155,500

Showing an excess over indebtedness of..... \$63,000
As above stated, 145 second mortgage bonds have been deposited with the Trustees, at \$500 each, against which there has been issued..... 51,750

Leaving on hand..... \$20,750

If the first and second mortgage bonds and preferred stock on hand were sold at their par value, it would liquidate the debts for which they were pledged, and leave an excess from the first of \$38,700, from the second of \$65,000, and from the last of \$20,750, or an aggregate of \$124,450, to be applied to current indebtedness of \$80,000, and interest due on 1st prox. \$18,000. But to realize first mortgage bonds at this time would involve a loss upon their value of certainly \$17,900, and probably \$26,850.

The most earnest and active attention of the Board has recently been directed to such negotiations as would enable them to discharge the liabilities of the Company.

To meet engagements the Board suggest that a call be made upon all the shareholders of thirteen dollars (\$13) per share; and that to those who respond, the Directors should be instructed to issue the preferred stock. If this meets concurrence, the proportions assigned the shareholders would be as follows:

	Shares at \$13	
City Council of Charleston.....	8,000	\$104,000
State of South Carolina.....	4,100	57,300
Banks.....	1,600	20,800
Individuals.....	3,904	50,752
Shares.....	17,904	\$232,752

The receipts of the road from all sources for the five months from the 1st March, ending 31st July, were \$84,373 19—an amount which covers our actual running expenses and the interest on our indebtedness.

It was not in thorough operation until the 8th October last, consequently there are no means of comparing its present receipts with those of a corresponding period in a previous year.

The following resolutions were unanimously adopted, viz:

Resolved, That in the opinion of this meeting, the only timely, practical and effectual measure that can be adopted to extinguish the debts of the Company and conclude the payments for construction, is that recommended by the Direction to the adoption of Council, to wit: That the City, the State, and the Banks shall unite in furnishing the money for the remaining \$240,000 of second mortgage bonds at par and in rateable proportion to their several subscriptions.

Resolved, That this measure is recommended by the following considerations.

1. It affords protection to the stockholders against the possible sacrifice that might attend a pressure for payment on the part of creditors.

2. It gives them an undoubted security for the money advanced.

3. It averts the loss that must inevitably follow from the sale of these bonds to the public.

4. It enables the Directors to complete their arrangements to pay or consolidate the

debts due for construction, and to apply the future net income to the payment of interest and dividends.

Therefore, *Resolved*, That the Directors be requested and authorized to renew their application to Council and the Banks, and to apply, in like manner, to the State at the next session of the Legislature for the foregoing aid.

Resolved, That the Directors be requested to extend their appeal for aid to the private stockholders, and procure from them a proportionate contribution, if possible.—*R. R. Journal.*

From Herapath's Journal.

RAILROAD ACCIDENTS IN GREAT BRITAIN DURING THE YEAR 1857.

The Board of Trade report by Captain Galton, on railway accidents for the year 1857, has just been issued, and from it we learn that in the year, 25 passengers were killed, and 631 injured, "from causes beyond their own control."

These are all the real railway accidents in the year. There were others, such as from suicide, trespassing, &c., but they can not properly be placed against the account of railroads.

The 25 fatal railroad accidents in 1857, occurred mostly on English railroads. Of the 25, as many as 24 occurred in England, and of these 24, exactly half, 12, were killed in one accident, namely, the Lewisham accident on the South Eastern railroad. One passenger was killed on Scotch railroads. "In Ireland, (reports Captain Galton,) there were no passengers killed or injured from causes beyond their own control." On most of our railroads in England no fatal accidents have occurred.

The following is Captain Galton's account of the 25 fatal accidents, specifying the railroads on which they occurred:—

In England,—

"One passenger was killed at the London bridge station of the London, Brighton, and South Coast railroad, in consequence of a passenger train leaving the rails at some facing points.

"Twelve passengers were killed at the Lewisham station of the South Eastern railroad, in consequence of a collision between two passenger trains.

"Five passengers were killed on the Great Northern railroad, near Tuxford, in consequence of the train leaving the rails.

"A female passenger who had got upon the step of a carriage in a train which was thrown off the rails near the Collingham station, on the Lincoln Branch of the Midland railroad, either fell or jumped off and was killed.

"One passenger was killed near Hull on the North Eastern railroad, in consequence of a collision between a passenger train and a goods train.

"Three passengers were killed on Morgans Moor, near Pyle, on the South Wales railroad, in consequence of a collision between two passenger trains proceeding from opposite directions.

"One passenger was killed on the South Devon railroad, by his head coming in contact with a bridge."

In Scotland,—

"One passenger was killed near Lossiemouth on the Morshire railroad, by falling from a truck which had been imperfectly fitted up to convey excursionists, and the railing which gave way."

Thus, three accidents on three railroads supply almost all (20) of the 25 unhappy occurrences—

12 South Eastern railroad, Lewisham accident.
5 Great Northern Tuxford accident.
3 South Wales, Pyle accident.

20

The South Eastern have had to pay a pretty penny for the Lewisham accident, for Captain Galton informs us that "the compensation alone in the case of the Lewisham accident on the South Eastern railroad amounted to £25,000." £25000 in compensation for one accident!

The figures following will show how infinitesimally small is the number of fatal accidents to passengers in relation to the number of passengers carried:—

No. of miles of rail-road open.	No. of passengers conveyed.	No. of passengers killed.	Proportion of killed to carried.
1850.... 6,226	72,854,432	11	1 in 6,071,292
1851.... 6,555	85,291,095	19	1 in 4,491,268
1852.... 7,113	89,135,729	10	1 in 8,913,572
1853.... 7,448	102,289,690	36	1 in 2,841,296
1854.... 7,842	114,358,888	12	1 in 9,529,907
1855.... 8,175	118,595,134	10	1 in 11,859,513
1856.... 8,499	129,347,592	8	1 in 16,168,449
1857.... 8,900	returns not complete.	25	cannot be calculated.

The proportion of passengers killed to passengers carried will probably be found to be, when the calculation can be made, about one in 5,200,000 in last year; one passenger killed for every 5,200,000 carried.

Bad, therefore, as 1857 has been for accidents, it is better than 1851 and 1853. We have seen how it is that the number killed is so high as 25 persons. We might say that one casualty causes the excess.

Nearly all the accidents occurred "from accidents which happened to trains."

The suggestions of Captain Galton contained in the paragraphs we now quote, is worthy of consideration.—

"Having regard to all the circumstances of this intricate question, it appears that the only practicable mode of obtaining a diminution of railroad accidents would be to endeavor, by means of a more satisfactory investigation into the causes of the accidents, to obtain a more sure and just action of the law by which compensation is awarded. This would, probably, be best effected by causing a public inquiry to be made into the circumstances connected with every accident attended with injury to passengers or loss of life, and by an immediate publication of the report, showing the causes of accident. The necessary tribunal might be constituted in a similar manner to those which inquire into accidents to ships under the Merchant's Shipping Act, viz: by two justices or a stipendiary magistrate, and an inspecting officer of this department as assessor.

"The clear knowledge of the cause of accidents would save much useless litigation by claimants for compensation; and the shareholders and the public would obtain an impartial account of the circumstances which led to the accidents, immediately after their occurrence, which would tend materially to diminish mismanagement.

ALBANY & SUSQUEHANNA RAILROAD.

At a recent meeting of the Board of Directors, the following resolution was adopted:

Resolved, That the road be put under contract from East Worcester to Oneonta, to be completed at the same time now contemplated from East Worcester; and that the President be requested to proceed at once to exe-

cute contracts for the construction of the road from Albany to East Worcester with such restrictions and conditions as the Executive Committee shall deem prudent and necessary with reference to the means of the Company; and that such progress be made at the tunnel section as may secure an early completion of the road, and that the chief engineer be directed to prepare such section for contract at as early a day as practicable.

MONETARY AND COMMERCIAL.

The demand for money during the week past has not been so brisk as for a few weeks past. The supply of currency is ample for good paper. Ruling rates 8@9 per cent.

Eastern Exchange is more in demand. Buying rates par to 1-8; selling, 1/4 prem.

The Philadelphia, Germantown & Norristown Railroad Company have declared a dividend of 5 per cent., payable on 1st of October.

The following are the Earnings of the North Pennsylvania Railroad in August, 1857.....\$20,647 37
Same month last year.....29,793 15

Decrease.....\$745 77

From Dec. 1, 1857, to Aug. 31, 1858.....\$210,547 30
Same time last year.....165,494 69

Increase.....\$44,742 61

The Assignees of the Ohio Life and Trust Company have published a statement of the condition of that institution, showing the annexed results. It is any thing but a satisfactory statement, either to creditors or stockholders. It is proper to state, in this connection, that the late Cashier in this city has received a full acquittance from the Trustees of all claims against him. It was, we understand, granted unanimously. The results at the Cincinnati office are made more favorable from the fact that about a million of assets were transferred at the time of the failure from the New York office to Cincinnati, and of course the New York statement is more unfavorable from the same cause. The balance-sheets of the different departments are as follows:

OHIO LIFE INSURANCE AND TRUST COMPANY—AT CINCINNATI.

Liabilities—Banking Department.	
Circulation.....	\$4,000 00
Dividends Unpaid.....	6,663 00
Assignee's Certificates:	
Outstanding.....	\$122,175 77
Less amount issued for obligation of N. York Agency.....	47,507 69
Office Checks on New-York:	
Outstanding.....	38,693 30
Certificates Deposit:	
Outstanding.....	22,164 44
Individual Depositors:	
Amount due them.....	262,531 97
Due to Banks and other Correspondents.....	75,519 16
	\$450,444 95

Assets—Banking Department.	
Bills Receivable.....	\$193,396 58
Estimated bad.....	17,510 00
Total.....	\$181,396 58
Estimated good.....	45,715 91
Offsets claimed.....	13,250 00
Held under attachments.....	540 67
Suspended Debt.....	\$41,532 09
Estimated bad.....	15,344 23
Total.....	\$33,677 36
Estimated good.....	21,141 80
Offsets claimed.....	4,536 06
Due from other Banks and other spondents:	
Held under attachments.....	\$100,963 03
Bonds estimated at.....	18,700 00
Cash.....	93,390 56
Whereof has been used for the redemption of 100 bonds Cincinnati, Hamilton and Dayton Railroad Company, pledged in New York.....	\$63,422 50
	\$420,073 63

LIABILITIES, TRUST DEPARTMENT.	
Certificates of Deposit:	
Outstanding.....	\$293,308 66
Life Policies:	
Amount estimated as sufficient to cancel this claim.....	25,000 00—\$268,308 66
Total.....	\$748,753 61
ASSETS, TRUST DEPARTMENT.	
Bills receivable.....	\$229,173 86
Estimated bad.....	126,226 20
Total.....	\$102,947 66

Estimated Good.....	\$88,331 99
Offsets claimed.....	2,197 93
Held under attachments.....	12,414 74
Real Estate unincumbered, estimated	31,658 00
Held under attachments.....	24,133 34
Bonds, estimated at.....	83,600 00
Decree against the Nashville Insurance and Trust Co., estimated value.....	\$60,000
Less fees and expenses allowed by the Court.....	21,000 39,000 00—\$281,339 00

Balance.....\$701,412 63

AT NEW YORK—LIABILITIES.

Banks and others:	
Amount claimed.....	\$1,763,759 59
Admitted.....	\$1,459,427 40
Disputed.....	409,332 19
Assignees' Certificates.....	47,507 69
Collection Paper:	
In possession of attaching creditors in New York.....	488,240 94
Upon this amount it is estimated a loss may accrue, say 25 per cent.....	122,060 24—\$1,338,327 52

\$1,938,327 52

ASSETS.

Loans.....	\$463,697 92
Estimated as bad.....	302,245 92
	191,452 00
Offsets claimed.....	\$12,250 00
Held under attachments.....	179,302 00
Bills receivable.....	223,279 43
Estimated as bad.....	48,704 59
	174,574 84
Offsets claimed.....	34,094 00
Held under attachments.....	140,180 84
RECEIVER OF SUPERIOR COURT, NEW YORK.	
Bills Receivable.....	\$27,310 44

Offsets claimed.....	34,094 00
Held under attachments.....	26,096 75
Banks and other correspondents.....	863,448 89
Est. as doubtful and disputed.....	664,772 83
Bad.....	94,327 69—\$759,100 52

74,248 34

Estimated as good.....	15,507 57
Held under attachments.....	27,037 11
Offsets claimed.....	31,653 54
Suspense account.....	\$241,878 86
Est'd as valueless, Individual accounts.....	617,857 94
Held under attachments.....	3,513 76
Estimated as doubtful.....	\$87,268 62
Bad.....	727,073 54

\$814,342 16

Bonds—Held under attachments.....	214,900 00
Unincumbered.....	92,059 00

\$778,050 40

CINCINNATI OFFICE.

	Debtor.
Amount of the Capital Stock.....	\$2,000,000 00
Amount of other Liabilities, as near as can be ascertained.....	748,758 61
Total.....	\$2,748,758 61
	Creditor.

Amount of the estimated value of Assets.....	\$701,412 63
Amount of various claims against the New York Agency, paid by Cincinnati Office.....	2,109,983 60
	\$2,311,395 23

Excess.....\$62,642 6

NEW YORK AGENCY.

	Deb'tor.
Amount of the present Liabilities, as near as can be ascertained.....	\$1,938,327 52
Amount of various claims, paid by Cincinnati Office, as above.....	2,109,983 63
Total.....	\$4,048,311 15

	Creditor.
Amount of the estimated value of Assets at New York Agency.....	\$777,050 40

Loss, or Excess of Liability.....	\$3,270,260 72
Assets at Cincinnati.....	\$701,412 62
Assets at New York.....	778,050 40

Total.....\$1,479,463 03

Deduct as above.....	950,374 40
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Remains to meet uncovered claims....\$529,088 63

CONDENSED STATEMENT.

Liabilities at Cincinnati.....	\$ 748,753 61
Liabilities at New York, admitted.....	1,628,995 44

Disputed.....	309,372 16
Total.....	\$2,687,681 13
Offsets at Cincinnati.....	\$141,083 99
Offsets at New York.....	79,211 53
Attachments at Cincinnati.....	137,897 28
Attachments at New York.....	691,971 50
	950,374 40

Uncovered.....\$1,726,706 73

In our last issue, we noticed the existence of a more animated feeling in the market for both Bonds and Stock; this state of things has continued during the two weeks last past, and we to-day quote increased sales, and, in most instances, at better rates. The very large amount of business now crowding upon most Western Roads, and the reports, made public, of a large per cent increase in gross earnings, together with a more economical management, and a consequent decrease in running expenses, all serve to inspire renewed confidence and strongly attract the attention of capitalists to investments of this character.

We note sales of Covington and Lexington 2d mortgage 7s at 45 to 46½, being an advance of 1¼ per cent; 3d mortgages of same road at 30; Ohio and Mississippi 2d mortgage Construction Bonds at 20; Hamilton and Dayton 7 per cent. 2 mortgage at 74, and the 1st mortgages of same Co., at 88; Little Miami 6s at 83½, an advance of ½ per cent; Cincinnati 6s at 81; Ind Central 10 per cent. 2d mortgage at 75; Indianapolis and Cincinnati 7 per cent. 2d mortgage at 75; Columbus and Xenia Dividend Scrip due in 1862 at 90, and Ohio and Mississippi 1st mortgage bonds at 50.

In stocks, a greater advance has been established, with sales of Little Miami shares at 79; Columbus and Xenia at 77; Indianapolis and Cincinnati at 40, an advance of 3½ per cent; Cincinnati, Hamilton and Dayton at 45; Ohio and Mississippi 4¾; Washington Insurance Co., 100; Cincinnati Insurance Co., 95; Firemen's 120; Farmers Bank Ky., 120, and Cincinnati Gas and Coke Co. 120. All of these quotations show a satisfactory advance over prices noted in our last circular.

The money market has been abundantly supplied with both Currency and Exchange; rates of interest have generally favored borrowers. The market for Eastern Exchange has declined and we quote sight on New York, Boston, Philadelphia and Baltimore at par to ½ prem. buying, and ¼ prem. selling rates. Rates on New Orleans are nominal at ½ dis. to ½ prem. Gold is in good demand at ¼ prem.

SALES AT THE NEW YORK STOCK BOARD.—Sept. 13.

\$1,000 U. S. 6's, '63, coup.....	114
2,000 Miss. 6's.....	84½
3,000 do.....	84½
10,000 Tenn. State 6's, '90.....	90½
7,000 Cal. State 7's, new bonds.....	82
11,000 Erie R. R. Bonds, '75.....	32
1,600 Erie R. R. M. Bs.....	99
1,000 Ill. Cent R. R. B.....	90½
14,000 do do.....	90½
1,000 La C. & Mil. L. Gt. Bs.....	24½
2,000 Gal. and Chic. 1st Mort.....	96
500 Shares New York Central.....	80
100 " Erie R. R.....	18½
700 " Reading.....	49½
20 " Pacific Mail St. Co.....	92
100 " Hud. River R.....	28½
150 " Harlem R. R. R.....	10½
55 " Mich. Cent.....	58
420 " Mich. S. & N. Ind.....	24½
271 " Mich. S. & N. Ind. pref.....	46
20 " Cleve., Col. and Cin.....	91
200 " Galena & Chicago.....	82½
150 " Cleveland & Toledo.....	34½
200 " Chicago & Rock Island.....	72
20 " LaCrosse & Milwaukee.....	9½
60 " Panama.....	112½
300 " Illinois Cent. R. R.....	75
280 " Reading Railroad.....	42½

The Auditor's telegraphic report of the earnings of the Michigan Southern and Northern Indiana Railroad for the first week in September, shows a gain over the receipts for the same period of last year:

First week Sept.	1857.	1858.
Passengers.....	\$28,906	\$21,848
Freight.....	21,153	29,088
Mails.....	930	1,047
Total.....	\$50,989	\$51,983
Gain.....		\$994

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Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

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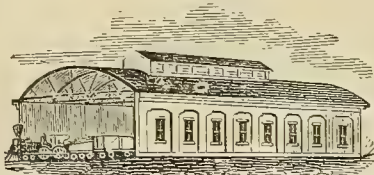
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CHARLES ELLET, Jr., Civil Engineer.

No. 288 H Street, Washington, D. C.

april 2

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Feb. 1858,
Mar. 25, 1858.

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9 South William St., N. Y.

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, SEPT. 23, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING.

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Office No. 167 Walnut Street

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THE CENTRAL (TEXAS) ROAD.—We give the statement of the business done by this road for the year ending August, 1857, and 1858:

Total passengers from September 1, 1856, to Aug. 31, 1857	\$18,778 23
Freights from September 1, 1856, to Aug. 31, 1857	19,567 75
Total	\$38,345 98

Passengers from September 1, 1857, to August 31, 1858	\$31,323 10
Freights from September 1, 1857, to August 31, 1858	62,049 24
Total	\$93,372 34
Increase this year over last	55,026 36

The above shows a gain of 143 per cent., and a corresponding gain for the next year would give a total income of \$226,894 78. If the road progresses as fast as is now promised, there is no reason why it should not be realized.—*Houston Telegraph.*

☞ The earnings of the New York and New Haven Railroad for August were \$72,720 52, against \$96,984 in August of last year.

☞ We call attention to the proceedings of the Memphis Stockholders of the Southern Pacific Railroad. Private advices from Dr. Fowlkes, gives the most encouraging accounts.

EXPENSE OF AMERICAN RAILROADS—A DELUSION AND ITS EFFECTS.

There are several things in the *management* of our railroads which have never commanded the attention they should have done, and which have led to great mistakes. One of these is the actual amount and nature of Railroad Expenses. It is quite evident, that if it be necessary to use money for some other purpose, than the mere running of the road, (perhaps equally important an object,) and that money can not be got, except from the revenue, that the managers of the company will be strongly tempted to take that money, and cover it up, by charging it under the head of "expenses." There would be no other wrong in this, than that of charging it under the wrong head; but, it would be a deception on the stockholders and the public, who would find the margin of profits much less than it really was.

Again: The loose and generally extravagant mode of expenditures, in this country, must in many cases, make the real expenses much greater than they really should be. For example, in the consumption of fuel and water, there has undoubtedly been great extravagance and unnecessary wastage. The bituminous coal of our western country affords the best and cheapest fuel, which can be employed; yet, our western railroads do not employ it! There seems to be a fatuity, in never changing a bad custom, or a bad tool, till necessity imposes it upon us.

In one word, we think, and have long thought, that from purposed errors of accounts, want of economy, and extravagance of expense, the *cost of running* our roads is very much increased, in appearance, and the *profits* diminished. In one word, the public and the stockholders of railroads are under a delusion, as to the *actual* expenses of railroads, and, therefore, think them worth less than they are. Take, for example, this problem:

Railroad A.—Receipts	100
Expenses reported	60
Net profits	40

In receipts there are 10 paid for things, which should be charged for capital; and 10 lost in wastage on fuel, water, iron, etc. Then the account stands:

Railroad A.—Receipts	100
“ “ Expenses	40
Net profits	60

Now, let the gross receipts be \$400,000; then, in the former case, the *net* profits is \$160,000. In the latter it is \$240,000.

Now, if the capital be \$3,000,000, the net profit is 5.1 per cent, in the latter 8 per cent. This difference, it is plain, makes all the difference between a very poor investment and a very good one.

We believe, that the difference we have here given, by way of illustration, actually exists in a large number of roads. If it does, it is of high importance to the railroad

interest of this country, that it should be corrected. It is not necessary that the actual dividend should be paid to stockholders; but it is necessary that the *actual truth* should be known. If a railroad actually makes eight per cent. dividend, when only the running expenses, with proper economy are counted, it is of great consequence to the stock and bondholders, that it should not be represented as making only 5 per cent.

The recent work of Messrs. *Holley & Colborn* has suggested to us these remarks, by proving that the English Railroads are run at much less expense than ours; a fact which should startle every American Railroad man, and first, in regard to the relative cost per mile of English and American Railroads, we venture to say that our readers will be startled by the following figures.

Annual expense of American railroads	\$120,000,000
Annual expense of English railways, same mileage	80,000,000
Annual difference	40,000,000
Average annual expense for maintenance of way of American lines	\$33,000,000
Average annual expense of English lines, same mileage	12,500,000
Annual difference	20,500,000
Average annual cost of fuel for American lines	\$18,000,000
Average annual cost of fuel for English lines, same mileage	7,500,000
Annual difference	\$10,500,000
Total annual expense of American railroads	\$171,000,000
“ “ of English railways	100,000,000
Total annual difference	\$71,000,000

So that for the same mileage there is a difference against the American system of \$71,000,000 in the total expenses, whilst in the consumption of fuel alone, there is, in the European system, less than 60 per cent. of the quantity burned in our locomotives.

Taking these figures as true, we say, that they startle us. Yet, without having time to examine specific facts, we have had running in our mind, the idea, that the cost of *fuel* and of *way*, on our railroads, was far too much; yet, as we have already remarked, we more than suspect, that the head of *expenses* in our roads has to bear the burden of much, which should be charged to *capital*.

Obviously the basis of any comparison of European and American Railroads must be their relative economical results. Here is a tabular statement of the receipts and expenses of certain lines in Europe and America:

	Receipts per mile run.	Expenses per mile run.	Per cent of expenses on receipts.
England, (1856)	\$1 44	\$0 63½	44
France, (1855)	2 03	0 87½	43
New York, (1855)	1 76	1 00	57
Massachusetts, ('55)	1 69	1 05	62
Massachusetts, ('56)	1 83	1 08	59

The railways of New York and Massachusetts may be fairly taken as types of all the roads in the northern United States.

But, in what does this difference of expense consist? We shall learn something of this by seeing what Europeans expect to do, in diminishing still further the expenses of their roads.

The New York *Evening Post* says:

"And while the economy of European railways is in such striking contrast with our unthriftiness, it deserves to be borne in mind that European engineers are yet sanguine of attaining results still more satisfactory. The adoption of raw bituminous coal, in place of coke, will save *one-third* of the present cost of fuel. Heating the feed water generally will save *fifteen* per cent. of the fuel. The use of pure water instead of the ordinary unprepared waters, will save *ten* per cent.; improved expansion apparatus, 25 per cent.; correct counter balancing 10 per cent.; and the total saving would give our American engineers 58 per cent. of the present locomotive expenses."

The English trains are *lighter* than ours, for both passengers and freight; but their locomotives are *quite as heavy*. This is the secret of their greater speed, while there is even less wear.

The average speed on English railways is 25 per cent. faster than that of American trains. The Great Western was the fastest road in the world, and its express *ran regularly* 117 miles in precisely *two hours*, or 58 5 miles per hour. In New York State, in 1855, the average rate of trains was 24 miles per hour. In Massachusetts, in 1851, the average rate was 23 99 miles per hour, and in 1857, the average sunk to 22 $\frac{1}{4}$ miles. In other states the speed does not average so high.

There is no doubt that *labor and iron* are cheaper in England than in this country, but many other things are much higher, and in the long run, we think prices for the various expenses of a railroad would be but little in favor of England.

Taken, as a whole, we are inclined to believe, that the economical part of railroad management is far superior in Europe to ours. There are many reasons why it should be; and not the least of these, is the fact, that in old countries economy is much more necessary, and is reduced to a perfect system. We are convinced, that if a perfect economy was employed on our railroads, and nothing charged to expense, but what belonged to it, that the running expenses of most of our roads would not exceed thirty-five per cent. on the gross receipts.

OHIO AND MISSISSIPPI RAILROAD.—The Treasurer of the Ohio and Mississippi Railroad makes the following statement showing the business of the Road for the month of August:

	1858.	1857.
Passenger earnings.....	\$83,635 32	\$91,108 13
Freight.....	58,510 50	35,865 19
Total.....	\$142,135 82	\$126,973 06
Increase.....		\$15,270 63

He states that the earnings would have been from thirty to forty per cent. greater had the rates of last year prevailed. The above figures cover the receipts of the entire road from Cincinnati to St. Louis, the amount

being divided between the two divisions, in the proportion of 58 for the Eastern and 42 for the Western.

CHICAGO AND ROCK ISLAND R. R.

The annual statement of the Chicago and Rock Island Railroad is nearly ready. We gather from it the following figures giving the result of the traffic of the year ending 1st of July last, showing net earnings equal to about seven per cent. on the capital stock. The current year thus far does not show an equally favorable result, July and August showing largely decreased earnings as compared with those months in 1857:

Gross earnings of year ending July 1, 1858.....	\$1,407,845 72
Operating Expenses.....	778,816 75
Total.....	\$629,028 97
Interests on bonds.....	\$99,715
Rent of Berean Valley Road.....	125,000
	224,715 00
Net earnings.....	\$404,313 97

The income account stands as follows:

Dr.	
Interest.....	\$99,715 00
Rent of Berean Valley Road.....	125,000 00
Operating Expenses.....	778,816 75
Balance to Credit.....	587,458 57
Total.....	\$1,549,985 12
Cr.	
Balance July 1, 1857.....	\$133 139 43
Gross earnings of 1857-58.....	1,407,845 72
Total.....	\$1,549,985 12

The capital stock is \$5,603,000, and bonded debt \$1,397,000, together \$7,000,000. The Company has no floating debt. The assets of the Company, representing the balance of the income account, etc., are:

Due from Bridge Company.....	\$161,320 00
Chicago and Rock Island Stock.....	101,500 00
Fuel and Materials paid for.....	285,777 00
Due for Freight, etc., and Cash in the hands of Agents.....	150,299 96
Cash in Bank.....	49,834 45
Total.....	\$748,791 41

The balance of the credit of income account is \$537,483 37. Since the previous statement fifty-five bonds have been converted into stock.

VINE CULTURE IN THE S. W. ALLEGHANIES.

BY DAVID CHRISTY.

The preceding articles embraced a few facts favoring the opinion, that the Catawba grape, in mountain districts similar to that in which it was originally found, will be exempt from mildew and rot. Additional testimony is now afforded upon this subject, showing that what was then hypothesis, may now be considered as a well-established theory. A second letter from Mr. Guerin, states that though the present season has been an unfavorable one with him, as to the temperature and humidity, yet his Catawba vines, as heretofore, are entirely exempt from mildew and rot.

Mr. Guerin's dwelling house is at the base of his vineyard, and is nine hundred feet above the bed of the Ocoee river, some five or six miles distant. His mode of planting is represented in the frontispiece. His first zone of vines, surrounding the mountain's

side, extends two hundred and thirty feet higher than the level of his house. At the upper margin of this vineyard, he has left a belt of the native forest trees, which extends one hundred and sixty feet higher, to serve as a rampart between the zone of vines below, where early frosts sometimes prevail, and the summit of the mountain, which is entirely exempt from spring frosts and where the grape succeeds admirably.

The entire height of the mountains at this point, above the river, would appear to be about one thousand two hundred and ninety feet. There are other locations where the main ranges of the mountains extend to an elevation of two thousand feet, and where experiments, relating to altitude, can be made upon a more extended scale.

Mr. Guerin's suggestions, in reference to the formation of companies for grape culture in the Southern Highlands, are very important, and should claim the attention of capitalists. Our own mountains may as well supply three millions of dollar's worth of wine annually, to the people of the United States, as the hills and vales of France and Germany. But how is this to be accomplished, unless capitalists undertake the task?

[Written in French—Translated by JAMES W. WARD, Esq.]

VINONA, August 1, 1858.

DAVID CHRISTY—*Dear Sir:* Your letter of the 2d of July is received; also, the copies of your report, which I have read with much interest, and I owe you my sincere thanks for the flattering things you said in relation to myself. You tell me that the vine-crop at Cincinnati will again prove a failure, and desire to know what we are doing here. The yield for the year 1857, may be put down at an average of four hundred gallons of wine per acre. The grapes were very sound, but they did not attain their full maturity, being overtaken by a frost on the 29th September. The wine, however, is of a good quality, and my sparkling Catawba is equal to the Champagne, of France, on the testimony of some French gentlemen, who are engaged in the business of importing wine at New York, and who have tasted mine here.

Last winter was of so mild a character, that every species of vegetation was advanced in the spring more than a month, and by the last of April, the early buds of the vine had already indicated their bunches. A heavy frost visited us on the morning of the 27th, and destroyed every bud. The secondary buds remained to us, but unfortunately these pushed forward too rapidly, and early in May a second frost came and destroyed them all. We now pursued the method resorted to in France, under similar circumstances, for the re-establishment of our vines and, to our great surprise, the buds, springing from the axils near the old wood, pushed forward with astonishing vigor, and we now have hopes of realizing a good half crop. If, as is usually the case here, the season remains warm till the middle of October, the adaptation of this country to the cultivation of the vine will be demonstrated in a very evident manner. Our Catawbas present a very vigorous appearance, with very healthy bunches, notwithstanding the unfavorable weather, which has marked both the spring and the summer. We have

had constant rains and a temperature of 94° through the day and 82° at night. The berries of our Isabellas, however, though generally fine, are in some cases, upon bunches of the most vigorous growth, marked with white spots, with black points in the center; these rapidly spread over the berry, and it soon falls off. I attribute this specie of rot to the excessive warmth and humidity of the atmosphere, that has prevailed here for two months, by which a too abundant supply of sap has been produced, which, by its extravagant copiousness in certain berries, bursts the cells and vessels, and leads to their decay.

An excess of sap, I may state, may always be corrected by cutting off or reducing the roots. By this means, we may also retard one or two weeks the too early vegetation in spring. We make a general practice, in the month of November, of taking of the earth at the foot of each vine, to the depth of about nine inches, for the purpose of removing the roots that have formed during the summer. Hereafter, I shall grow down to the depth of the lowest crown of the root, which I will suppress, leaving only the radicles at the base of the plant; which, being uninfluenced by the warmth of the spring, till a later period and in a more progressive manner, will naturally retard the development of the buds.

When I had the pleasure of seeing you here, you will remember, I spoke to you of the permanent differences of temperature we find to exist at different altitudes upon our mountains. Starting from my garden, immediately surrounding my house, and ascending about two hundred and thirty feet, we pass a zone exposed to early frosts. Ascending beyond this, one hundred and sixty feet, we reach, upon the crown of the hill, a belt that the frost never touches. In this zone, the grapes and peaches there cultivated, have never suffered loss in any season on account of the frost; and early in August, while the grapes of the lower zone had scarcely attained their full size, those of the top of the hill were nearly ready for gathering. To render this fact more appreciable, I have enclosed a sketch of my vineyards at Vinona, upon which you can distinguish the relative heights of these belts. The summit of Frog Mountain is seen in the distance.*

You will thus see, my dear sir, how experiment has demonstrated to us the course we should pursue, in order to avoid a complete failure of our crops. Besides our ordinary vineyards and orchards, occupying a belt ranging two hundred and thirty feet from the base, we shall establish other plantations one hundred and sixty feet higher up the hill.

I have recently received information of some French families who wish to come out and settle near me, for the purpose of cultivating the vine and raising sheep; and I have hopes of one day seeing this part of our mountains covered with beautiful vineyards, and superb flocks of sheep. For six years, I kept upon my farm a small flock, and I have not yet lost one. During the winter, they run about over the vine-terraces, browsing the turnips I sow for them in the fall; and by this means the earth is supplied with all the manure it requires.

In my opinion, the way to give a rapid impulse to this branch of industry and to enhance the value of our mountains, would be to form a company, with a sufficient capital, to forward the improvements regularly and rapidly. It will be difficult, I may say impossible, to

obtain satisfactory results by the aid of emigration as it now presents itself, destitute as it is of capital and of that knowledge and experience which is so essential to success. Let us suppose a company with a capital of \$15,000 and 5,000 acres of land, and see what would be the results at the end of six years, the time required to bring the vines into full bearing. We will commence with twenty-five acres of vines, and twenty-five acres in pasture and the usual crops necessary to sustain the farm; fifty acres would thus be required to be broken up at once.

The cost of clearing and breaking up is at present.....	\$9 00 per acre.
Cost of plowing.....	2 00 "
" furrowing for the vines.....	1 00 "
" removing and burning rubbish.....	2 00 "
Total.....	\$14 00
Add interest for six years.....	5 04
	\$19 04 per acre.

Making the expense thus far, for the fifty acres, \$952 00.

There would be required four oxen, ten cows, and fifty sheep, which would cost, say.....	\$ 350 00
Four men and two women for six years.....	5,000 00
Cost of buildings and utensils.....	500 00
Cost of management for six years.....	3,600 00
Interest on this sum.....	561 00
Cost of 5,000 acres of land at fifty cents.....	2,500 00

Total expenses for putting the whole in operation.....\$13,463 00

At the end of six years we should have twenty-five acres of vineyard, producing, say 350 gallons of wine per acre.....	\$8,750 00
The sheep would have increased, in six years, 50 per cent., producing 562 sheep, at \$1 00.....	562 00
They will have yielded besides 4,600 lbs. of wool, at 25 cts.....	1,150 00

Net.....\$10,462 00

The business will thus be seen to promise, as a result of six years' prosecution, a profit of about 80 per cent. Few speculations would prove more satisfactory than this. We may suppose, farther, that in six years we can count upon 2,500 vines to an acre, or 72,500 growing vines, worth, according to general calculation, \$1 00 per vine, but we will call the value 50 cents a vine, and the result will be as follows:

72,500 vines, at fifty cents.....	\$36,250 00
Fifty acres in cultivation, worth say \$15 00.....	750 00
Sheep, cattle, cows, utensils, etc.....	1,000 00
4,500 acres original land—for extension—fifty cents.....	2,250 00

Value of premises, supposing buildings good for nothing.....\$40,250 00

This represents an increase of more than 300 per cent., and the prices named can not certainly be regarded as too high.

The grand result of the enterprise may be summed up from these figures, as follows:

Value of 5,000 acres and improvements, at end of six years.....	\$40,250 00
Product of premises in wine, wool and sheep, for same period.....	10,462 00

Total value.....\$50,712 00

Total cost of land, stock and labor.....13,463 00

Net gain in six years.....\$37,249 00

Accept, my dear sir, the assurance of my friendly consideration. N. E. GUERIN.

BALTIMORE AND OHIO RAILROAD.—The earnings of this road for the month of August,

Was.....	\$371,988 60
August, 1857.....	447,910 47
Decrease.....	\$76,621 87

The financial year of the Company commenced with October; a comparison of the eleven months of the present year, compared with the same months of last, shows a decrease of \$487,603 95.

MINNEAPOLIS AND CEDAR VALLEY R. R.

EXTRACTS FROM REPORT OF THE CHIEF ENGINEER.

NORTHFIELD, June 7, 1858.

To the President and Directors of the Minneapolis & Cedar Valley Railroad Co.:

GENTLEMEN:—I beg leave to submit the following report of the location of the Minneapolis and Cedar Valley Railroad, with an abstract of the estimated cost of its construction and equipment.

A careful reconnaissance of the country through which your road should pass, having been made, the surveying party commenced operations on the 27th of May, 1857, and by the 29th of July had completed the definite location of the road, as required by the act of Congress, and of the Territorial Legislature of Minnesota.

Leaving Minneapolis by a southeasterly course, the line of route traverses quite a level country with easy grades and little curvature, to Fort Snelling, where it crosses the valley of the Minnesota river, near its junction with the Mississippi. The valley is here 4 050 feet wide, the grade line being 107 feet above the summit level of the water, affording at all times ample room beneath the bridge for the passage of the largest steamboat that navigate the Minnesota river. Passing thence west of Pilot Knob, for a distance of two miles, with an ascending grade of 40 feet per mile, the line proceeds through an undulating prairie for four miles, through oak openings. On this latter portion of the route there is a considerable quantity of heavy earth work, deep, and usually short cuts and fills alternating. Thence after traveling Vermillion Prairie, it passes, for above a mile, through Popular Grove, situated on a ridge elevated 102 feet above the valley of the Vermillion Creek. Descending thence and crossing Chubb Creek Prairie, it enters the "Big Woods," 2 miles north of Northfield, and continues through these for fourteen miles, passing through Northfield, and crossing Cannon river at Faribault. Thence ascending to the prairie, it proceeds over undulating ground, crosses Straight river at Owatonna, and thence ascends to the table land, whence flow, in opposite directions, the Zumbro, Cedar, Le Seur, and Straight rivers. Continuing in a course almost direct, and chiefly over gently undulating prairies, it proceeds to the southern boundary of Minnesota, by Austin, near where it crosses Cedar river, and terminates on the south side of section 26, township 101 north, range 18 west of the fifth principal meridian.

Southward from Owatonna, there is no expensive work. The length of the road is about 112 miles. The curves are few and easy. The maximum grade is forty feet per mile.

Besides the Minnesota river, the only streams of any magnitude which the road crosses, are Cannon, Straight, and Cedar rivers. These require bridges of 120 feet span. The smaller watercourses which it crosses, are the Minnehaha, Vermillion, Chubb, Wolf, Mud, Crane, and Rose Creeks, requiring bridges from forty to eighty feet span.

The following summary of the cost of construction and equipment, is taken from the detailed estimates formerly submitted, with maps and profiles, to your board. Provision is intended to be made for a substantially built and well equipped single track road, furnished with frequent passing places, and a telegraph

line for its exclusive use. Such it is expected, will be needed for the performance of its legitimate business, which the road must have of necessity, and which, if economically and judiciously managed, must yield a highly profitable return for investment, even though the *through traffic* should hereafter be shared by any rival road which may be constructed:

	Total cost.	Cost per mile. nearly.
Right of way, grading, masonry, and superstructure.....	\$2,321,996	\$19,866
Fencing and telegraph line.....	141,761	1,206
Machine shop, depot buildings, wood and water stables, and other fixtures.....	162,750	1,433
Rolling stock.....	438,430	9,913
Engineering expenses, agents, etc.....	130,000	1,140

Total cost of construction and equipments.....\$3,097,937 \$27,660

Above 430 acres of land have been donated by Congress to aid in the construction of your road, which, even at the very low price of seven dollars and a quarter per acre, will cover the entire cost of the road and its equipments.

The line of the route passes through a well watered country, blessed with a most healthful climate, wholly free from fever and ague, and from those bilious diseases so prevalent in the more southern parts of the great basin of the Mississippi. From Minneapolis to the "Big Wood," near Northfield, the soil is usually a dark loam of good quality, resting on a subsoil of sand or loose gravel. Thence to the southern terminus, a rich vegetable mould, or a deep, calcareous loam, on a clay subsoil, is met with, presenting a tract of country unsurpassed for agricultural purposes. Though the line from Faribault southward generally traverses a prairie of country, yet, as it runs near Straight and Cedar rivers, the supply of timber is not deficient, a good growth of oak, elm, walnut, maple, basswood, etc., being found in the valleys of these rivers. * * *

From the southern terminus on the Iowa State line, outlets to the Mississippi, and thence to the great lakes, Canadas, and Eastern and Southern States, will be furnished by roads to McGregor, Dubuque, and Clinton, towns on the Mississippi, opposite the terminus of railroads already in operation from Milwaukee and Chicago.

By these three lines, the distance from St. Paul to Chicago does not differ much, being from 458 to 470 miles. * * *

In view of the actual development of the country with which the Minneapolis and Cedar Valley Railroad is connected, and the expanding prospects that present themselves, it must be regarded as a most important link in one of the most prominent channels of commerce in the North-west, and furnishing in its land grant, and other resources, security for investments, such as few similar projects can offer. Respectfully submitted,

LAWRENCE KELLET,
Chief Engineer, M. & C. V. R. R.

MODE OF DETECTING DECAY IN TIMBER.—The *Cosmos* reports from other journals, a simple mode said to have been adopted from immemorial times in the ship-yards of Venice for ascertaining the fitness of timber for their constructions. "A person applies his ear to the middle of one of the ends of the timber, while another strikes upon the opposite end. If the wood is sound and of good quality, the blow is very distinctly heard, however long the beam may be. If the wood were disintegrated by decay or otherwise, the sound would be for the most part destroyed."

Convention of the Stockholders OF THE SOUTHERN PACIFIC RAILROAD COMPANY, HELD AT MEMPHIS, SEPTEMBER 17, 1858.

MEETING OF STOCKHOLDERS.

MEMPHIS, Sept. 15, 1858.

At a meeting of the stockholders of the Southern Pacific Railroad Company, residing in and near Memphis, held this day, on motion Gen. R. V. Richardson was called to the Chair, and Col. John Martin appointed Secretary. The Chairman, on taking his seat, addressed the meeting as follows:

GENTLEMEN:—I thank you for the honor conferred in electing me to preside over your deliberations. With your permission, I will state the objects of this meeting.

This is a Convention of stockholders in the Southern Pacific Railroad Company, living in and near Memphis.

On the 19th day of October, 1857, Mr. Yerger, the President of your Company, executed a deed of trust upon your road, its property and franchises, to secure sundry debts against your Company. On the 1st day of June last, the deed of trust was foreclosed by a public sale of the road, its property and franchises, all of which were purchased by some one or more of the creditors, who have organized, what they term a new Company, upon the ruins of your company. The question to be considered by you, now, is this: Was the deed of trust valid or a nullity? From the facts which I have learned, I give it as my opinion that it is null and void; and that there was fraud in law, and in fact, both in its inception, development and foreclosure.

Your company is a body corporate, chartered by the Legislature of Texas, possessing such rights, privileges, and franchises as that body saw proper to invest you with. The great franchises of your company, under your charter, are to build a railroad, to operate it, and to hold property. These are vested in the body-corporate or stockholders, and not in the Board of Directors, or the officers and agents of the Company. You can not be divested of these great rights, without your voluntary consent, expressed as stockholders, in a meeting of stockholders, two-thirds of the shares concurring; and this consent must assume the form of a by-law of the Company. Have the stockholders adopted a by-law authorizing the execution of this deed of trust upon your road, its property, and franchises? I understand not. Then the deed of trust was executed without authority, and was a usurpation of power, and, therefore, null and void.

But another trouble has arisen. In this war between the old and new companies, the State of Texas comes in, like the fox in the fable, and attempts to run off with the prey. She has filed a bill, in the nature of a *quo warranto*, the object of which is to declare your charter forfeited, on the ground that the proper officers of the company did not report, to the Governor of the State, the affairs of the Company, before you had built any part of your road. It is said, under the act of the Legislature passed subsequent to the passage of your charter, you were required to make annual reports, showing how many miles of road you had completed, how many cars you owned and were running, and how many lives had been lost by the running of your road. If this be so, how could such an act be applied to your company, when you had, at the time when required to report, not one mile of road completed, did not own one sin-

gle car, and were simply an organized company, with brilliant expectancies, but few realities.

I think the act is not applicable to your company at that time, and upon a careful showing of facts to the State of Texas, the proceedings will be dismissed.

The President of the Company will appear before you, and report the prospects, difficulties, hopes and aims which he entertains, and the facts with reference to these matters. He has recently attended the meetings of stockholders at Louisville and Cincinnati, and has made such an exhibit of the condition and expose of facts, difficulties, and prospects as has justly made him the recipient of the highest eulogy of Hon. J. Guthrie, those conventions, and the press of those and other cities, and I have no doubt he will make the same exhibit and expose here to-day.

When that is done, it is for you, gentlemen, to say what you will do; whether you will be supine, or act for your own interest, and the prosperity and success of the Southern Pacific Railroad Company.

REMARKS OF T. H. WILEY, ESQ., AT THE MEETING OF STOCKHOLDERS IN THE SOUTHERN PACIFIC RAILROAD CO., HELD AT MEMPHIS, SEPT. 15, 1858.

I became a stockholder in the Southern Pacific Railroad in March last, and had no other connection with it until the following June. Towards the latter end of May, I was accidentally informed in Knoxville of a meeting of stockholders which was to take place in New Orleans in a few days, and to which place I was urged to hurry off, as rumor said we were to be sold out for some cause not well understood. On my way through Montgomery and Mobile, I fell in with some of the Alabama stockholders, who were almost as much in the dark as myself as to the causes which for a time obscured the prospects of our Company. On our arrival at New Orleans we found the office of the Company in charge of a young Frenchman—placed there by the city stockholders to protect and take care of the books, papers and property of the office.

Mr. Yerger, the President, was absent, and had made no report of his stewardship while at the head of affairs, and so far as I know, even refuses to do so up to this time. Mr. Lawason, the Secretary, was absent, assisting in Texas to force a sale of the road and had made no report to the annual meeting of stockholders then to convene.

As no report had been made by Yerger, the President, or Lawason, the Secretary of the Company, and many of us had but recently come into it, very little information could be gained in the confusion growing out of the loose mode of doing business at the office. We met, however, and organized by electing Col. Archer, of Mississippi, Chairman, and not representing a sufficiency of stock for some days, we adjourned from day to day until the arrival of Post, Fowkes and others so augmented our numbers as to give us a majority of all the stock in existence, either by person or proxy. We then proceeded to business by electing Directors for the current year, with all the other officers contemplated by the charter, and in strict conformity with it and the by-laws.

When this business was dispatched we boxed up the books and papers of the office, and hurried off to Texas with them, proceeding five hundred miles up Red river under a burning sun, and on our arrival proceeded to open an office in Marshall, and to take pos-

session of the Road, now in controversy under a sham sale. We placed our own officers in charge of it on the 14th last June—to act under our orders—as ours was the Company which had built the Road and secured the Charter from Texas. The man, however, who acted as Engineer, and who was entrusted with the rolling stock, became intimidated at the threats of Col. Wigfall, who mentioned the Penitentiary as his place of destination, should he submit to our orders, and he thus became frightened from a performance of his duty. This, together with the singular weakness and vacillating conduct of Judge Frazer, in granting an injunction after the sale of the Road, and not before—by granting a general injunction with full powers on the 3d day of July last, and then on the 6th of the same month revoking the same power—rescinding his own decree when it was but three days old, and bonding us in the unheard-of sum of five hundred thousand dollars, without any corresponding equivalent.*

And thus, gentlemen, you can see what a task we had to combat in a land where all were strangers but myself. I need not detain you by recurring to the wrongs we suffered, or the slanderous imputations we bore while contending for our own rights as well as yours. It may be proper to state that nearly all of the new Company now in possession of the Road, were officers of the old Company, and are, therefore, responsible for the good or the evil of its past management since the office came south. In this number will be found the names of Scott, Wigfall, Hall, Ward, Blanch, Lawrason, and Hill, the attorney, for whose acts we are not accountable. Last year the officers and agents of the Company were paid eighty thousand dollars for overseeing ten miles of road. Surely, we are not answerable for this extravagance. Remember that Lawrason and the spoils party left us but four dollars in the Treasury to begin the year with—that we had no fat contracts to let out—and that we came forward to repair damages, not to create new ones.

We came forward to rescue the Southern Pacific Railroad Company from the rapacious grasp of those who now have it in possession. As stewards for you and the other stockholders, we evade no inquiry connected with your welfare in these matters. But while invoking your calm judgment of our own acts, we can not endure to be charged with the delinquency of others. We had nothing to do

*The first decree of Judge Frazer, in chambers, on Saturday, the 2d July, reads as follows:

"The Clerk of the District Court of Harrison county, will issue the writ prayed for in the annexed petition—on petitioner's giving bond in the sum of one hundred and fifty thousand dollars with security—conditioned as required by law.

C. A. FRAZER,
Judge of the Sixth Circuit.

"Marshall, 3d July, 1858."

The next chapter from the Book of Deuteronomy or second reading of the law appears to have been from Judge Frazer, out of chambers, on Tuesday, the 6th day of the same month of July, and handles the same matter as follows:

Under and by virtue of the above order, the clerk will issue a writ of the following tenor and effect, and none other, to wit: Restraint said defendants and their successors, as directors and members of the Southern Pacific Railroad Company, from issuing or selling stock in the name of said Company, from destroying, selling, or otherwise disposing of any of the property of said Company, now in their possession and under their control; and from taking up or removing any of the iron rails laid down on the bed of said road.

The said clerk, under the above order, shall not issue said writ, if said bond shall not be given by 10 o'clock, P. M., on Friday next. Marshall, July 6, 1858.

C. A. FRAZER,
Judge of the Sixth District.

A funny fellow of Texas proposes to send up a copy of this full blown dilemma to the *London Punch* for classification; supposing it, of course, to belong to the two horned Unicorn family.

with the administration under Yerger and Lawrason. Only three of the present Directory were in the last Board—while the conflicts of the past summer have been in and around Marshall, and has been borne by the officers recently elected. Draw this distinction, and you will soon learn who is to blame for past error. We ask, then, so much confidence only as may be necessary to retrieve your affairs, and to resume a work so much needed in Texas.

It gratifies me to state that our President, Dr. Fowlkes, has shown himself equal to almost any emergency which can occur, *should his health hold out*. Never despairing—never quailing under the threats of personal violence, he has manifested a zeal, a sagacity, and an equilibrium of temper, rarely combined in the same individual. For two months of the past summer I have been by his side and witnessed the large share borne by him in the bitter conflicts for our rights in Texas. From New Orleans to Marshall, a distance of more than five hundred miles up Red river, then harassed for six weeks by every available stratagem of an unscrupulous party—backed by the wayward fancy of a nondescript Judge; then back to New Orleans and up to this place during the dangerous and debilitating months of summer, and all this in the sickly cotton climate, leaving on my mind the impression that such efforts are seldom accomplished. During this period much solicitude have I had for his health, now so valuable to all of us. But he has enemies who revile him far and near. And where is the active, independent, self-reliant man without them in this fast age of ours, where honor is bestowed without merit, and lost without a fault? He is now our Palinaurus while the storm lasts, and our chance to reach the port in safety without him, is but dim.

Let us then cherish and defend him while so honestly and heroically devoted to the great work of extricating our Company from the surrounding gloom. *Quid times?* His cause is ours—his fortune and rights are now interwoven with our own and must soon be recorded among the other "*Rights of Man.*"

I would further remark that the transfer office in New York has become so odious in this latitude, that its usefulness is destroyed. During the past summer, I have several times written to Mr. Post, the Assistant Vice-President, in regard to it—and it has frequently occurred to me that the best interests of the Company calls for its discontinuance. Economy itself, so essential to the active operations of the Company, clamors for reformation in this department of our affairs.

REPORT OF DR. J. FOWLKES, PRESIDENT OF THE COMPANY.

To the Stockholders of the Memphis Convention:

I have a report in pamphlet from the Louisville meeting of the 24th ult, which details fully the condition and state of affairs of the Company as known at that date. I beg to present each stockholder here with a report, showing all material facts, together with the value of the property of the company, amounting to some \$2,098,000, and the specific items making up that sum. I may add, also, that I have not over-estimated the value thereof. The demands against the Company, making a monied liability of some \$465,000, and a stock account of \$3,120,000. I have taken these items from the reports of my predecessors in office, and from the most reliable data coming into my possession since

I was elected a Director and President of the Company in June last.

I made up the liabilities, as classified under the deed of trust of December, 1857. A few of the debts in that list have been in part arranged and liquidated. There are a few others to be added—but not materially varying the amount. I feel confident that the whole amount of monied indebtedness will not exceed \$500,000, and will be probably covered by the \$465,000. Some of these debts have changed hands, but they are still outstanding against the Company, and must be liquidated or paid off by the Company, or they will be sued upon and the Company sold out under execution.

I ventured the opinion in my Report to the Louisville meeting, on the 24th August—also at the Cincinnati meeting, on the 31st August, that I could free the Company with a loan of \$200,000 from the Stockholders. I also ventured the opinion that the "New Company" did not rely upon the title they had acquired under the Trust Deed—it being void, both in law and in fact—the sale having conferred no title; but, that the "New Company" expected to obtain a title to the property, rights and franchises of the Company, under a purchase by execution sale—and for which purpose the law of Texas, of the 19th of December, 1857, was originated, and passed, at the last session of the Legislature.

The section of the law, bearing upon this point, is as follows:

Sec. 5. The road-bed, track, franchise and chartered rights and privileges of any Railroad Company in this State, shall be subject to the payment of the debts and legal liabilities of said Company, and may be sold in satisfaction of the same; but the said road-bed, track, franchise and chartered powers and privileges shall be deemed an entire thing, and must be sold as such; and in case of the sale of the same, whether by virtue of an execution, order of sale, deed of trust, or any other power, the purchaser or purchasers at such sale, and their associates, shall be entitled to have and exercise all the powers, privileges and franchises granted to said Company by its charter, or by virtue of the general laws of this State; and the said purchaser or purchasers and their associates shall be deemed and taken to be the true owners of said charter and corporators under the same, and vested with all the powers, rights, privileges and benefits thereof, in the same manner and to the same extent as if they were the original corporators of said Company, and shall have power to construct, complete, equip and work the roads upon the same terms and under the same conditions and restrictions as are imposed by their charter and general laws of this State.

Prior to the passage of this act, the franchise of a railroad Company in Texas was not the subject of sale; and the decisions of the courts in some of the States hold the doctrine, that, neither the road-beds nor rolling stock of a railroad can be sold, as they are essential to the exercise of the franchise of the corporation, in which the public are interested. I think this doctrine has much reason to support it, as well as those decisions of the courts of the country; but, be this as it may, it has been made the public policy of Texas, to alienate the road, property and franchises of railroad companies by execution sale, as specified in Section 5th of the Act of the 19th December, 1857. The same Act, Section 4th, specifies also the mode and terms of the alienation of the franchises, etc., of Railroad Companies by trust, deed or mortgage, as follows, (being the latter clause of the Section:)

"And it shall require a vote of a majority of not less than two-thirds of the stock of the Company to establish such by-laws; and no company shall have the power to make any trust deed or mortgage, on the franchises or property of the Company, unless the power is expressly given by the by-laws of the Company."

From which it will be seen, that, prior to the passage of this act, no railroads in Texas could encumber, or transfer, or alienate its rights and franchise by a trust deed or mortgage—and since that period, only in the mode as specified in the law above quoted. Hence, waiving all other objections to the deed of trust made upon the 19th of October, 1857, under which the sale was made, on the first day of June, 1858, the

President and Directors had no power to mortgage or alienate the franchises of the company—and if it had been made subsequent to the 15th of December, 1857, then no law, authorizing the execution of such an instrument, by the stockholders of the Company, was obtained or procured, as required by the Act of December 19th, 1857. But to settle, beyond all cavil or dispute, the question as to the Deed of Trust of 19th October, 1857, and the sale of property on the 1st of June, 1858, under it, I beg to lay before you the facts upon which we expect to vacate the sale. The facts set forth in the bill filed by us, exist, and there is no doubt of the full and entire establishment of them before the Courts of Texas.

For the facts relied upon to set aside the sale under the Trust Deed on the 1st June last, I refer to the "Citation" to the purchasers, to be found in the pamphlet before you. The facts existing are considered sufficient in themselves to set aside this sale, independent of the legal invalidity of the Trust Deed itself. Upon this point, lawyers, both in and out of Texas, so far as consulted by me, all concur. I can not doubt its correctness. A just compromise should at once terminate these difficulties, and I have no doubt such will be made.

The facts herein stated, will satisfy every intelligent and unbiased mind that the trust deed is void in fact, as well as in law: and the arrangements made between the purchasers and the trustees of the trust deed on the day of sale, on the 1st of June, 1858, vitiates and renders null the sale! These propositions are manifest; so much so that I shall not consume time by commenting upon them. They strike, by a naked statement, the experience and good sense of business men as self evident truths. Our danger is from Sheriff's sale under securities. To meet this exigency I have called upon our stockholders at Louisville, Cincinnati, St. Louis, New York and Memphis, with every prospect of entire success.

The action by the State to declare forfeited the charter of the Company, can not be maintained; and I indulge the hope that His Excellency, Gov. Runnels, and the Attorney-General of State, upon a full and thorough investigation of the facts in the case, will dismiss the State's bill of complaint. Since the Louisville and Cincinnati meetings of the stockholders of the Company, I have received the opinion of the ablest counsel in Texas, confirming the opinion I expressed in my communication to the executive of Texas, to be found in the pamphlet now before you—dated August 16th, 1858—to which I invite your attention, having fully presented the reasons for this belief.

I beg to read the opinion referred to, forwarded to me by Col. C. S. Todd, Vice-President of the Company, who has been in Texas, looking with fidelity and zeal to your interests. He is entitled to the grateful recollection of the stockholders in this Company for his personal sacrifices since our difficulties have arisen:

MARSHALL, August 20, 1858.

Col. C. S. Todd, Vice-President S. P. R. R. Co.:

DEAR SIR,—Your note of date the 4th inst., asking our opinion as to the suit pending in the District Court of Harrison county against said Company for forfeiting the charter, has been received and considered by us; and in reply, we have to say, that we believe the grounds alleged and relied upon for the forfeiture of said charter are insufficient in law.

Very truly Yours,
DUDLEY S. JENNINGS,
C. M. ADAMS,
P. MURRAH.

Suits were instituted, as I anticipated, upon some \$186,000 of debts against the Company at the last term of the District Court of Harrison county, Texas, commencing on the last Monday of September. Some of the debts will be liquidated, and judgments can not be had upon them at this term of the court; upon others, no legal defense exists to them, and judgment will probably be rendered. By giving security

for these the Company have the right of appeal by "writ of error," to the Supreme Court of Texas, which will stay collection until April next. Our Company is without credit in or out of Texas. As far as practicable, for the still greater protection of the stockholders of the Company, I shall endeavor to obtain the control of the judgments which may be obtained, and resist all others designed to be used for the sacrifice of stockholders, to the last extremity. My great object is to protect the Company, the stockholders and myself, against the "New Company," or the rapacious avarice of speculators. The moral power of our 2 or 3,000 stockholders in twenty-six States of the Union must not be lost or disregarded by its managers.

My last advices from Texas are to the 30th of August. They represent the "new Company" as almost broken up among themselves; with the exception of a single individual, its members seem favorably disposed to make a compromise of existing difficulties, and upon reasonable terms. With the utter failure of the "new Company" to secure the connection and association of solid and substantial men as stockholders, from the imputations in the public mind of fraud against them, the invalidity of the trust sale under which it claims existence, I have entire confidence with this "pressure of honest public opinion," and the fullest evidence before them of final defeat, that they will, upon some proper terms, very soon arrange matters—thus freeing the Company from its disabilities, and furthering the construction of this great national highway through Texas to the Pacific ocean! It is their interest pecuniarily, it is their duty, and every calculation both public and private, seems to me to conspire to bring about this most desirable result, soon after my arrival at Marshall.

Believing they will be benefitted by such adjustment, and the public interest of the State and nation advanced thereby, I hope, at an early day, to report to the stockholders and the country this event! I believe the spirit and determination lately manifested at Louisville, Cincinnati, St. Louis, New York, and elsewhere, will re-assure the members of this "new Company," and a doubting public, of the power of success, in its 2,000 or 3,000 stockholders, scattered over twenty-six States of the Union, to construct the Road across the State of Texas! The progress of this work with the munificent grants by the State of Texas as its basis, can not fail to bring to it the liberal aid of the Federal Government—for the better performance of its service. All the waste and extravagance in the past management of the Company are more than repaid to it by the concessions from all sections of the country and by all candid advocates of inter-oceanic communication, that the Southern Pacific Railroad is the "shortest, cheapest and best route; and the fact that a railway connection between the Atlantic and Pacific oceans is demanded by public and patriotic considerations, and challenges the aid and assistance of both the State and Federal Governments of our Union! These two admissions are worth to this Company the whole capital stock of \$3,120,000, of which so much complaint is making, independent of \$2,098,000 possessed by it—which I now seek, with your aid, to rescue from the "new Company, for the benefit of those who rightfully own it.

It surely can not be, that any stockholder, who has a right conception of this enterprise, and who knows the true condition of the affairs of the Company will hesitate to secure to himself the stock which he owns in it, by co-operating with those of fixed and determined purpose, to rescue the Company from the avaricious hands stretched out to grasp and appropriate it—and as I and others feel, most improperly. Without the assistance of its own stockholders, with its \$2,000,000 of property, the vast enterprise must and will be sold under executions by its creditors and the new company.

With disputed title, no third party will free or credit the Company! If there be such, the responsibility must rest upon their shoulders, and not upon the present Board of Directors of the Company, for they most anxiously desire, and now urgently insist, that every stockholder, from the smallest to the largest, whether he lives North, South, East or West, to secure to themselves, respectively, the interest held in the Company upon terms of justice and equality, and stand with unanimity of feeling, and with a common bond of interest, and acting with perfect good faith to each other and to the public. "The new Company" can not possibly succeed—the trust deed and sale being void. The "new Company" is not a corporation, but a new co-partnership; and the members thereof can not perfect title so as to become a corporation under execution sale, as has been doubtless expected by it; for if a sale be made they will not be permitted to become the purchasers by the stockholders of the Company. Every stockholder in "the new Company" being a mere partner, as in any other association of individuals, without corporate powers, stand individually and personally liable for all contracts all debts made by it, and to our stockholders for damages, sufficient to bankrupt all whose names have been so far spoken of as members, that no prudent or discreet man of substance will take, subscribe or hold stock in the "new Company." It can catch only such individuals as are ignorant of such responsibility, or such as are insolvent or reckless will alone become associated with it; and, failure and defeat inevitably await that association. Already, in Texas, I am informed, from these and like considerations, that the more solid portion of this "new Company" are restless and uneasy, and have declined to become stockholders by taking its stock for their debts against the "Old Company." This, if no other cause existed, would destroy the success of this work, under this new association. I regard this as an incontrovertible position; this apprehension alone is sufficient to defeat and disband this association.

I beg to add, also, that it is in my judgment, the true policy of this Company to make no enlargement to its capital stock. It has adopted the policy of issuing its post bonds upon the road and the land donated and acquired by the State of Texas, as sections may be completed, by which, it is believed, that section after section can be constructed across the State of Texas. The financial system of the Illinois Central Road has been adopted with such modifications as are proper for differing circumstances of our Company from it, and with such restrictions and guards for protection to the bondholders, as to furnish THE CAPITALISTS OF THE WORLD A PERFECT SECURITY! The most careful business men have examined the system, and pronounced the security a perfect one.

I forbear further reference now to this subject, by simply remarking, if the small capital stock, at present existing, of about \$3,120,000, be the basis, and the holders thereof the sole beneficiaries of this stupendous enterprise, the inducements are strong, beyond all precedent, with each and every shareholder, to protect now by prompt and hearty co-operation, his interest in this exigency of the Company's affairs. Interest, as well as manly spirit to defend our rights, will not halt or falter in its efforts.

I desire to see all bona fide stockholders protected from both principle and policy; all who will do his duty to himself and his associates, ought and will be protected, as I frankly avow the determination to buy the property, road and franchises of the Company, to protect my own rights and interests in connection with third parties. If, by possibility, the sale cannot be prevented by my best efforts, assisted by stockholders, shall fail to provide relief of the Company, no effort shall be unmade and no expedient go untried with friends and associates;

these failing, I shall reluctantly go to strangers to defeat our adversaries. All who do pay shall be protected with myself; and I am sure no stockholder and right thinking mind *outside* of those who have "plotted and planned" the sacrifice of the Company, with the design of appropriating to themselves and associates, can be found to refuse assent to the propriety and the justice of my avowed and fixed determination in the premises—working no injury to those who cannot or will not unite to defeat others, and to secure themselves. I have met with no one who understands the proposition, who have failed to heartily approve it. If stockholders will not secure to themselves, with a pittance, \$2,098,000 of property, and the rights and franchises of a Company, worth millions upon millions of dollars, all must know that the sum of \$465,000 can be easily and promptly raised from capitalists anywhere, and almost in any country, for such investment. I had offers of such assistance in Cincinnati and St. Louis during my late visit, in case of such alternative; an alternative which I hope not to arise. I have full confidence that all the money required will be promptly supplied.

I might undertake to show the value of the grants of land to the Company by Texas, by fixing your minds upon the small limit of the cotton lands of the world; detailing the production and consumption of this great staple, annually, since the cotton gin was invented, under the increase of population, and the advancement of civilization. The growth of cotton, its manufactures, and its influence on commerce, present statistics, full of interest to the statesman and capitalist. "Cotton is King"—and the territory producing it, his throne. It must rule and control the *forces* that contribute to his power, wealth and dominion.

Who is to receive the profits of this vast enterprise? The \$3,120,000 of stock, yielding annually dividends from the Road of millions of dollars, and the vast surplus, realized from the 8,000,000 acres of land granted by Texas, *beyond* the mere cost of the Road, must be the sole recipients. The result, carried out by figures, is astounding; they are beyond the comprehension of small and contracted minds; they alarm and render distrustful the timid, who always shrink before what is bold and adventurous in undertaking—hence the opposition and the doubts of some: and from the full conception thereof by others, we find the open, outstretched hands of greedy avarice, whose burning thirst for what belongs properly to the Stockholders of this Company. While we meet with such adversaries and such opponents, we have the encouragement and support of the whole Press, almost, of the South and Southwest; and with the *merits* of the enterprise, under a wise and faithful management, with the assistance of a patriotic Press, there can be no question of triumphant success, or of the realization of the most splendid results, to gratify public spirit, to repay and reward investments of capital, and bringing advantages, in almost every conceivable shape—social and pecuniary—political and religious—giving to it the untiring efforts of ambition, the struggles of patriotism, the legislation of government, and the prayers of the church! With these supports, this great work can not fail of successful progress—crushing, with the wheel of its power, all who improperly stand in its pathway.

Our expenses have been reduced from *above* \$80,000 per annum, to about \$10,000 at present. This Company has now at least the merit of the most rigid economy, with a *working Directory*—necessary elements of success in all railroad enterprises. With these gen-

eral facts, inasmuch as a small *pro rata* loan, for a short period, of \$200,000 will protect the \$3,120,000 of capital stock, advised to be furnished by the late meetings at Louisville and Cincinnati, of fifty cents by each shareholder upon each share of his stock to the Company. As interest and duty combine to do so, who can doubt that it will be promptly supplied? I have no apprehensions upon the subject. All other places and stockholders, so far as heard from, have cheerfully acquiesced in this suggestion. Some large stockholders have proposed, who are unable to make this loan, to make a large and liberal surrender of their stock, as a consideration to the paying stockholders. So far as I have had an expression upon this subject by paying stockholders, this surrender of stock has been regarded as just and perfectly satisfactory. The whole number of shares are about 620,000—and if all shall pay, it makes the sum of \$310,000.

I may take occasion to state here, that some of our strongest stockholders expressed to me a readiness to secure a large number of slaves, to be placed upon the road permanently. I do not doubt that the Company will soon be in a position, and in such hands as shall command the sanction of the nation, and challenge thereby that confidence which brings to it the favorable disposition of all, essential to its success, both *in* and *out* of Texas.

It may be proper to state that the installments due upon the stock are being paid with promptitude now by debtors to the Company. If they *all* pay, the Company can free itself without the loan recommended by the stockholders at Louisville, Cincinnati, St. Louis, and elsewhere.

There are individuals in "the New Company" who have been misled, and whose objects are proper; all such must have discovered the errors committed, and now feel disposed to retrace their steps. I deem this statement but just, as "the New Company" is generally, both *here* and *abroad*, regarded as wrong in principle and fraudulent in purpose. It has not been my habit to use the harsh epithets, denunciatory of these parties or of their motives; but rather to ascertain the remedy for the evils we endure, avoiding all *collateral* questions and *immaterial* issues, until the embarrassments and dangers of our Company were terminated. This has been, so far, my policy; the result will, I feel, attest its correctness. It will be time enough for the members of "the Old Company" to commence the work of adjustment between themselves when they shall have conquered "the New Company" and surmounted dangers threatening their existence. He who seeks too much may lose all; he who unnecessarily creates issues and imaginary troubles, may find himself oppressed beyond endurance. I am led to these remarks that I may be rightly understood—as I now labor for *practical* results, rather than a distinction from many Quixotic battles.

There are some issues, however, essential to the maintenance of our rights. These I shall not decline. I therefore ask to descend to the mention of some of the *acts* of some of the *members* of "the New Company," and of vile and contemptible appliances, whose mention and exposure I deem necessary, not so much now to the protection of our Company, as to innocent and unsuspecting stockholders *remote* from the scene of our controversy in Texas.

Some members of the new Company have been engaged in writing *secret* and *slandorous*

letters to our stockholders, with the evident object of breaking down the old Company, by which they alone hoped to attain success. Some of these letters are in the hands of our friends for exposure of their authors; we, also, are beset at Cincinnati by some of the former agents of our Company as *abettors* in the barefaced and villainous attempt to disseminate falsehood, and thereby mislead the unwary and honest stockholder. I learn that old agents of our Company who owe our Company largely, both unpaid installments and for issues for stock entrusted to them as agents, amounting to upwards of \$50,000, are *now* in the service of "the New Company;" they practiced the most infamous frauds upon the old Company and the fact is known to members of "the New Company," and I regret to see encouragement or countenance extended to these *creatures*, who are spurned by all honorable men; where personally known they are held as most detestable "scamps"—as no better than the thief or robber. One of these individuals has lately escaped from a Connecticut jail—lodged there not for "the crime of murder," but under "the charge of swindling." These plunderers are our slanderers—our adversaries! I refer to these parties simply to caution the stockholders of the Company from their letters and base and infamous statements of all such wretches—oral, written or printed! As I desire not to impugn the respectable and better members of "the New Company" by mere insinuations, and gross charges, I deem it proper to say that I stand pledged to verify the statements made, both by facts and with the names—*propria persona*—of the parties, whenever properly required to do so by "the New Company," or members thereof.

In conclusion, I ask the discrimination made between the Old and the New Company. There are but three Directors in the present Board who were in the Directory last year; the "New Company" is now composed, mainly, of Texas Directors—Secretary, Attorneys, Engineers, Contractors, etc., of the Old Company, for the last corporate year—yet the present Board of Directors of the Old Company, its officers and agents, have been confounded with the past management of the affairs of this Company, while they are resisting their errors and abuses, in behalf of themselves and the widely scattered stockholders in the Company by its former managers.

The "hue and cry" have been even made against the present managers, by those who compose the "New Company," and who managed the Old Company before our election in June last. This distinction is important to fix responsibility where it properly rests. The present managers of the Old Company shun no just accountability, and insist to stand or fall upon their own acts. The propriety of this, all must see and admit.

All of which is respectfully submitted.

JEPHTHA FOWLKES, *President*.

RESOLUTIONS OF MEETING.

Resolved by this Convention, That from a careful examination of the facts set forth in the citation, in the case of the Southern Pacific Railroad Company against Saunders and others, purchasers under the deed of trust, by lawyers here, and the written opinion of Messrs. Adams, Murrah and Jennings, attorneys in Texas; also, the Act of the Legislature of Texas, approved the 19th day of Dec., 1857, and the by-laws and proceedings of the Company, it is our deliberate opinion that the deed of trust executed by G. S. Yerger, former President, on the 19th day of October, 1857, is utterly null and void to all intents and purposes, and that the sale made under it, on the 1st day of June last, could and did not communicate any right, title, or interest in law or equity upon either the road, franchises or property of the Company, to the purchaser at that sale.

Resolved, That this Convention having examined carefully, by attorneys here, the bill of complaint filed by the State of Texas against the Southern Pacific Railroad Company, praying to declare the charter of said Company forfeited, for the reason that said Company had failed to report to the Governor of the State the affairs and condition of the Company, in pursuance of the provisions of the act of the 7th day of February, 1853; and have also carefully noted the provisions of said act, from which this Convention believes that no forfeiture of charter has taken place, in the facts alleged, under a proper interpretation and construction of said Act. It is the opinion of this convention that said Act was only intended to apply to railroads either in whole, or in part in usual and actual operation, and not to companies merely organized and constructing the first portion of their road, not a single mile being completed, and owning no engines or cars. But should this convention be mistaken in the construction placed upon said act, and should the Legislature of Texas have had the power to fasten the forfeiture clause of said act upon this company, under the facts alleged, this convention cannot believe that the great State of Texas will insist on the forfeiture of the Company's charter for the trivial causes alleged in the bill; the mere omission or dereliction of the officers of the company, when the State, and not one of her citizens, or any person else, has sustained any damage in consequence thereof; and should the State of Texas insist on a forfeiture upon a mere technicality, if such there be, thus destroying a great enterprise, for no good and sufficient reason, the public faith in the State would be discredited among mankind, and foreign capital would spurn investments in her various enterprises, nor can this convention believe that Texas will pursue a course so ruinous to her credit, her public faith; and this convention deliberately expresses the opinion that, when the proper authorities of that State shall have fully examined the facts, with reference to the alleged forfeiture, the bill now filed will be dismissed and the Company will be relieved from this embarrassment.

Resolved, This Convention is gratified to learn that the Board of Directors and President who met at Marshall in Texas, in July last, did adopt the following resolutions, to wit:

Resolved, Whereas the public mind is stamped with the impression that large amounts of fraudulent stock have been issued,

Be it Resolved, That all out-standing certificates of stock, whether issued from the New Orleans or New York office, be returned to the office in Marshall, Texas, for examination by the 1st of October next, and when found to have been regularly and properly issued, to be re-issued with new certificates from that office.

Resolved, That the officers of this Company be directed to enter into minute examination of the stock-book, in order to ascertain to whom, when, for what consideration, and by what authority, the stock outstanding against the Company was originally issued, and report the same as soon as practicable. Also, to ascertain the precise liability of the company—to whom, when, for what consideration, and by what authority, such responsibilities were created; and further that they shall ascertain and report all the property, assets, and resources of the Company.

And while this convention does not believe that any fraudulent stock certificates have been issued, by any former board, or officers, or agents of the company, still as it has been charged that such certificates have been issued, this convention believes that it is the duty of the proper officers of the company, to investigate this charge, and report the results of their investigations to the stockholders and the world.

Resolved, That in our opinion our road is the great desideratum of the age; that it must be a long link in the great railway chain that must bind the Atlantic and Pacific oceans together across our continent; that our route is practical under all circumstances; that our means are ample and abundant to construct it; that it is unequalled as a railroad investment, not only on account of its location, direction of route, termini and connections, but also on account of its landed endowments, so munificently donated, and money loaned by the State of Texas; that engaged in a work so grand in its aims, hopes and promises, and remunerative in its returns, this convention can not urge too strongly the most energetic prosecution of the work, when the embarrassments that now beset the Company shall have been removed; therefore, this convention does most heartily adopt the policy suggested and adopted by the late conventions of stockholders held at Louisville and Cincinnati, and approved by stockholders in other portions of the Union; and thus approving, this convention does hereby recommend to all stockholders everywhere, and pledge this convention to advance fifty cents on each share of five per cent stock as a loan to said Company, to meet the present emergency, and this convention now suggests and recommends that all stockholders living accessible to this city, at an early day, shall pay over to I. B. Kirtland the advances above specified, to be held by him as trustee, and to be paid over by him into the Treasury of the Company, when a compromise of existing troubles shall be made, and if no compromise shall be made, so that the deposit should not be called for, then the money to be refunded to the stockholders advancing it respectively.

Resolved, That this Convention does hereby advise and recommend to all persons indebted to the Company, whether for calls due on stock or otherwise, to pay their debts at the earliest opportunity to the Treasurer of the Company; and if such debtors shall still further persist in refusing to pay their due calls, we advise the Company to forfeit and sell and resell all such delinquent stock until all such calls respectively shall be paid; and to collect whatever deficit there may be under such stock sales in the most expeditious manner.

Resolved, Whereas this Convention has examined the list of liabilities against the Company, and have received explanations satisfactory and credible as to the manner in which these liabilities may be satisfied, it is therefore resolved that with the aid of two hundred thousand dollars in cash,

which it is believed will be loaned by the stockholders under the plan suggested and adopted, the entire indebtedness of the Company may be removed immediately, and the great work put upon a basis of credit and prosperity, and the loan of six thousand dollars per mile made by the State of Texas to the Company, upon the completion of the next section of twenty-five miles, making fifty miles of road completed, will make the sum of three hundred thousand dollars, available to the Company, under the loan bill, as a cash fund to pay debts, or aid in the construction of any additional division of the road; and the Company will own, when the fifty miles shall be completed, the road, the three hundred thousand dollars of loan, and five hundred and twelve thousand acres of land and two hundred and seventy thousand dollars now due on calls.

Resolved, That this Convention has confidence in the prompt co-operation of every stockholder, in loaning the amount desired, and paying the calls that may be due, and if all will so act, the liabilities can be promptly met, the Company freed and the work progressing; but if we shall be disappointed in this most reasonable expectation, and after all is loaned and paid that can be collected by diligent effort, and a deficit shall still remain, this Convention recommends the President of the Company, and such stockholders who may be willing to contribute to make up the deficit, and meet the liabilities of the Company; and if this deficit call not be met, we cordially approve of the expressed determination of the President to raise the amount, needed, from third parties, so as to protect his interests and the interests of those who may be associated with him, and such of the stockholders who may have co-operated with him, in raising the amount needed, as we can not conceive of what benefit it will be to the stockholders refusing to advance and pay, to have those stockholders who are willing to pay and advance, sink with them, in the general ruin, that must overtake all, on account of such refusal.

Resolved, That we are highly gratified at the deserved compliment paid to the President of this Company, Dr. J. Fowlkes, by the Hon. James Guthrie, late Secretary of the Treasury of the United States, in his speech at the late Louisville Convention, also by the Louisville and Cincinnati Conventions in resolutions, and by the press of these two cities and St. Louis, for the ability, energy and zeal he has manifested in his efforts to rescue our Company from Vandal hands, and impending ruin, and his patriotism in seeking to develop the resources of the State of Texas and the nation; and we do hereby endorse all that is said by these sources about the President, Directors and officers of the Company, for the protection of the Company, and its rights and interests, and we believe that the great object the President has had, and now has in view, is to protect the Company, and each and every stockholder in the Company with himself.

Resolved, That we recommend all stockholders who have not expressed their views, to meet at convenient points as soon as possible and express their views upon the subjects embraced in these resolutions.

Judge King offered the following which was adopted:

Resolved, That in the event I. B. Kirtland declines to act as such trustee, the Chairman is requested to convene the Stockholders and appoint some suitable person who will accept.

On motion, the following was adopted:

Resolved, That the Chairman, and Thos. H. Wiley, Esq., be requested to furnish a copy of their remarks, and that the President of the Southern Pacific Railroad also furnish a copy of his report for publication.

On motion of Col. Thos. H. Wiley, the following was adopted:

Resolved, That we approve the course pursued by R. W. Dougherty, editor of the Texas "Republican," a weekly paper printed in Texas, for his vigilance, firmness and unwearied devotion to the interests of the old Company, and recommend his paper to the patronage of all the stockholders of the old Company in the Southern Pacific Railroad.

On motion of A. Jones, Esq., it was

Resolved, That the Memphis and other papers throughout the country be requested to publish the proceedings of this meeting.

The meeting then adjourned, sine die.

R. V. RICHARDSON, Chairman.

JOHN MARTIN, Secretary.

P. S.—All Stockholders are requested to send their Names and Post Offices to the Office, at Marshall, Texas, so that they may be addressed when occasion arises rendering it necessary or proper.

J. FOWLKES, President.

✂ We understand that the New York Central Railroad has accepted the arrangement of the Philadelphia Conference, in regard to fares, etc. The Baltimore and Ohio, and the Pennsylvania Central, have referred it to committees, with power, which is considered as tantamount to acceptance.

✂ The Hartford and New Haven Railroad has declared a semi-annual dividend of 5 per cent, payable on the 1st of October.

THE CATAWBA WINE.

This is come to be one of the great staple productions of Hamilton county, and its manufacture is steadily increasing. Its introduction, and ultimate success as a regular business in the West, is due to the foresight and energy of N. Longworth, Esq., who began his experiments in grape-growing and wine-making, almost thirty-five years ago, and has continued them with unremitting interest to the present day. Mr. Longworth has made trial of every native variety of the grape, as well as of all the most promising of foreign origin, and the result is, that the only grapes worth cultivating, as permanent crops, for wine making, are the Catawba and Isabella. The Herbemont will probably become a rival of these in the estimation of wine-growers, but they are the principal standard varieties, and of them the Catawba is most largely cultivated, and is by far the most universally used in the making of wine. The Isabella would probably be entirely abandoned but for its good qualities in the making of the Sparkling Champagnes. In the Ohio Valley the annual product of the Catawba vineyards averages half a million of gallons of wine. The yield per acre is generally estimated at about 300 gallons, though 600 and 800 gallons have been produced in the vicinity of Cincinnati, and doubtless will be again.

The Catawba as drunk here is not very attractive to those accustomed to the brandied and sweetened wines from Europe, such as are most in vogue, but the taste for it once acquired, holds on for life.

Of the 500,000 gallons of wine made in the neighborhood of Cincinnati, about forty thousand gallons are made into sparkling wine, and the rest is drunk mostly by the people of the city and a few surrounding places, in its simple and pure state.

When Mr. Longworth discovered by accident, that the good sparkling wine, (like Champagne, Sparkling Hock and other kinds,) he commenced preparing it in the mode followed to produce those wines, and has since pushed the business as fast as possible. Sparkling Catawba having brilliant merits, has easily made its way to the consumers in all parts of the country, and by its immediately attractive sweetness and flavor, by its noisy and frothy manifestations, has greatly helped to introduce its more sterling and staple, though at first taste less lovely brother, Still Catawba. Years hence, the Sparkling wine for the tables of the rich and the occasional regalement of all, will doubtless be produced largely, and its annual production counted by millions of bottles, but the Still wine will be counted by its hundred of millions of gallons, as in France is now the case with Claret, Burgundy, Sauterne, etc.

The wine houses of Mr. Longworth, three in number, are, and for the last seven years have been, under the charge of his Director, Mr. Fournier, an accomplished wine Chemist, of Rheims, in Champagne, France, who receives a large salary, and devotes his entire time to the superintendence of the various processes, involved in this manufacture.

The quantity bottled annually by Mr. Longworth, is about one hundred and twenty-five thousand bottles Sparkling, twenty thousand bottles of Still wines, four thousand bottles Sweet wines, and four thousand bottles Catawba Brandy. He has now in cellar full three hundred thousand bottles, mostly quarts, of which twenty thousand are of Isabella. The demand for the wine rapidly increases,

and several other persons of excellent repute are extensively engaged in the business.

City Guide Book.

SOUTHERN PACIFIC R. R.

The Southern Pacific Railroad Company, chartered by the State of Texas, having become embarrassed to an extent which renders it impossible to extricate it in the usual course, and makes it absolutely necessary that every Stockholder should individually aid the Board of Directors in this emergency, either by a loan of fifty cents on each share of stock held by him, in cash or *bona fide* claims against the Company, or by a donation of one half of his stock: We the subscribers, holders of stock in said Company on which five dollars per share have been paid, hereby mutually agree to deliver unto E. C. Halliday, of the city of New York, as our Trustee, the loan of cash or claims or donation of stock, written below, and on the number of shares written below opposite to our names respectively:— And it is mutually agreed that the loans and donations so delivered to said Trustee shall be held by him until a sufficient amount shall be obtained by him, and other Trustees acting for other Stockholders under similar arrangements, shall, with what the Company may raise in other ways, be sufficient to put the Company in possession of its property, and pay off such debts as will enable the Directors fully to control the road, and all appertaining to it, and put the company in such a position as to enable it to raise money in the usual way.

2d.—Should there not be a sufficient amount raised as above mentioned to save the Company from destruction, then the said Trustee shall return to the undersigned the loans and donations so delivered to him, it being understood that such loans and donations to be delivered to such Trustee is secured until it be ascertained that the Company is either relieved from its embarrassments, or placed beyond the hope of relief.

And it is further understood and agreed that said Trustee shall report to other Trustees under similar arrangements at other places, the amounts he shall have received, and obtain from such other Trustees the amounts they shall respectively have received, and when a sufficient amount shall have been raised for the purposes above stated, then the several Trustees shall appoint a suitable agent to proceed to Texas, and carry out the object of this and similar subscriptions, by purchasing all judgments that have been or may hereafter be obtained against the Company, and paying off such pressing demands as it may be deemed advisable. It being supposed that two hundred thousand dollars will be sufficient for the purpose.

And it is further understood and agreed that if the sale of the road and its appurtenances becomes necessary in order to cut off any unjust claims against the Company, to terminate any litigation, or to obtain complete legal possession of the property, rights, or franchises of the Company, such agent shall have authority to apply the said loans and donations to the purchase of said property, rights and franchises, for account of the subscribers to this and similar arrangements, without however, any authority whatever to create or incur any liability whatever on behalf of any subscribers hereto in connection with any such purchase.

And it is further understood that so soon as the said Agent returns from Texas, the sub-

scribers hereto are to be called together to consult upon their further action in the premises.

And it is further understood that the said Trustee above named may, in case the Company is relieved from its embarrassments, arrange with the Company for the ultimate repayments of the said loans.

(The simple facts of the case come to this, that unless the subscriptions to this and other similar arrangements emancipate the Company, the road and its appurtenances must be sold by the sheriff under execution, and the stockholders thereby make a total loss; and the question for them is, whether it is better to make a loan of fifty cents per share, or a donation of one-half of their stock, or refuse to do anything and lose the whole.)

Persons receiving this notice may either send their subscriptions in money, claims or stock to the Trustee named above, or they may remit to such other Trustees as have been named at other meetings of stockholders in Louisville, Cincinnati, St. Louis, or other places.

EDWIN POST,

New York, Sept. 10, '58. Ass't Vice-Pres't.

COMMERCE OF NEW ORLEANS.

The annual report of the commerce of New Orleans shows results of a very gratifying nature, since the aggregate value exported is far in excess of any previous year, as follows:

1855.....	\$117,106,823
1856.....	144,256,081
1857.....	158,061,369
1858.....	167,155,546

This is a large annual increase, arising mostly from the sugar crop. The two crops of cotton and sugar compare with last year, as follows:

	Bales.	Cotton. Price.	Value.
1857.....	1,513,247	\$57 00	\$86,255,079
1858.....	1,678,616	54 50	88,127,340
Increase.....			\$1,872,261

	Hhds.	Sugar. Price.	Value.
1857.....	72,976	\$110	\$8,137,360
1858.....	279,697	64	17,900,608
Increase.....			\$9,763,248

These two crops give an increase of \$11,600,000, and tobacco is \$1,800,000 more than last year. The crops now all promise well, and the markets, as well for sugar as for cotton and tobacco, are of a promising nature, showing every indication of a very prosperous year, not only in a good yield, but in good remuneration for the produce. The large exports from New Orleans, and the diminished imports, have given a balance in favor of New Orleans, and the receipts of specie at that point have been as follows:

1855.....	\$7,46,037
1856.....	2,913,540
1857.....	6 5 0,015
1858.....	13,233,913

The banks retain in hand \$11,173,021, with a circulation of half that amount, against specie on hand at the same date last year of \$5,644,917.

The coinage of that point has been \$3,237,000 silver, and \$1,205,000 in gold, being in the aggregate about double that of the previous year. All these are high indications of prosperity for a "panic" year.

The aggregate imports and exports of New Orleans for the fiscal year, were:

	1857.	1858.
Imports.....	\$24,932,440	\$13,586,013
Exports.....	91,514,286	882,70,134

With these important elements of wealth, New Orleans last year encountered the panic from the North, and money rose high in value, but as the staples of sugar, cotton and tobacco began to be realized at good prices money fell in value, and the "revulsion" passed over. The reserves of specie are now large for that section, the indebtedness small, and the crops coming forward under circumstances of the best promise for the fiscal year.—*Economist.*

TENNESSEE AND ALABAMA RAILROAD.—At an election held at the office of the Tennessee & Alabama Railroad, in Franklin, Tenn., on Tuesday, the 3d August, for the election of fifteen Directors, to manage the affairs of said road for the ensuing twelve months, the following gentlemen were chosen, to-wit:

Thos. F. Perkins, C. W. Nance, of Davidson; W. P. Cannon, Dr. Saml. Henderson, John McGavock, Dr. B. M. Hughes, Philip W. Baugh, M. G. L. Claiborne, H. G. W. Mayberry, C. H. Kinnard, W. O'N. Perkins, Jno Marshall, Jno. S. Claybrook, Wm. Park, of Columbia; and Martin Stockard, of Mount Pleasant.

At a subsequent meeting of the Directors, Jno. Marshall was re-elected President; Robert H. Bradley, Secretary; Frank Hardeman Treasurer, and W. O'N. Perkins, Superintendent.

ALGER'S NEW FORM OF BLAST FURNACE.

Charles C. Alger of the State of New York, has devised a novel form of blast furnace, from which he expects important results.

Mr. Alger is a practical iron-master of twenty years' experience, whose observation upon hard coal furnaces, seems to have led him to the fact that anthracite furnaces are now blown with a pressure not over five pounds to the inch, can not be advantageously built with a larger crucible than six feet diameter at the "tuyere line."

To reduce large quantities of ore with the same fuel, and a pressure limited within five pounds per inch, Mr. Alger has conceived a change in the horizontal section of the crucible, the bosh, and the stack.

All his horizontal sections are ellipses of greater or less eccentricity. His crucible at the "tuyere line" being a much elongated ellipse, approximating a narrow parallelogram in its horizontal sections, which, at the "bosh," becomes an ellipse with axes of 18 and 7, and at the top of the stack, of 14 and 5.

He proposes to blow his new form of furnace by numerous "tuyeres" along the larger side of the crucible, (sometimes six on each side,) while at the narrow ends of the crucible are two dam stones of the usual arrangement, so as to admit of working, and drawing at both ends of the elongated hearth. With this elliptical furnace, and the introduction of the blast at many points, (on the longer side of the hearth,) so as to act efficaciously upon the narrow diameter of the crucible, he expects to effect a much larger reduction of ore with the improved stack, and at considerably less expense in every particular.

We take pleasure in recommending Mr. Alger's proposition to our readers as promising results of some consequence to the manufacture of pig iron.—*Journal Frank. Ins.*

MONETARY AND COMMERCIAL.

Since our last issue, the demand for money has slightly declined. The market continues easy for good paper, at fair rates. While the supply of currency is abundant, there is no plethora of capital hunting up unsound or wild investments. The current of currency is from the interior, and will, no doubt, continue to flow in this direction, until the opening of the Pork trade.

The market for Eastern exchange, says the Price Current, has been somewhat unsettled, and slightly excited during the week. The demand with several leading drawers having exceeded the current supply, thus leading to a material reduction of balances, an effort was made early in the week to advance rates to $\frac{1}{2}$ prem., but this was only partially successful. Three houses have continued to draw at $\frac{1}{2}$ prem., while others have charged $\frac{1}{2}$. The buying rate for New York has been $\frac{1}{2}$ prem., and for Philadelphia, Boston and Baltimore, $\frac{1}{2}$ @ $\frac{1}{2}$. In some cases dealers who checked at $\frac{1}{2}$ were buyers at the same figure, showing that the natural tendency of the market has been upward. New Orleans sight is bought at par, and sold at $\frac{1}{2}$ prem., but there is very little doing, trade with that city being, at present, almost entirely suspended. There is a fair demand for gold at $\frac{1}{2}$ prem. buying, and $\frac{1}{2}$ prem. selling.

PITTSBURG, FT. WAYNE & CHICAGO R. R.

The Earnings of the Pittsburgh, Fort Wayne and Chicago Railroad Company, for the month of August, show very favorably in view of the extremely low rates at which it has been necessary to transact the business. They are officially reported by the Auditor, as follows, viz:

From Freight.....	\$76,651 82	
" Passengers.....	60,161 58	
" Mail.....	4,482 20	
" Rent of Road.....	5,500 00	
" Miscellaneous.....	318 41	
Total.....	\$147,114 11	
Earnings in same month last year.....	136,716 64	
Increase, (7 $\frac{1}{2}$ per cent.).....	\$10,397 47	
Expenses in August, 1858.....	\$86,322 47	
" " 1857.....	83,676 50	
Increase, (3 1-10 per cent.).....	\$2,645 97	
Net earnings in August, 1858.....	\$60,791 64	
" " 1857.....	51,040 14	
Increase, (14 6-10 per cent.).....	\$7,751 50	

The following are the Earnings of the Cleveland and Mahoning Railroad for August:

Passengers.....	\$3,804 44	
Freight.....	8,836 00	
Coal.....	13,848 35	
Mail.....	262 50	
Total.....	\$26,755 29	
Expenses.....	8,671 53	
Net earnings.....	\$18,083 86	

PENNSYLVANIA CENTRAL RAILROAD.—The business of the Pennsylvania Central Road has been as follows:

PENNSYLVANIA RAILROAD, SEPT. 1.

TRAFFIC DEPARTMENT.

	Gross Earnings.	Expenses.	Net Earn'gs.
Aug., 1858.....	\$412,299 19	\$240,488 84	\$191,740 71
Aug., 1857.....	463,911 48	280,503 36	193,402 62
Increase.....			\$8,838 13
Decrease.....	\$31,682 29	\$40,020 42	
Jan. 1 to Sept. 1, 1858.....	3,418,378 08	1,967,947 54	1,450,430 54
Same period last year.....	3,444,920 74	2,204,364 58	1,240,566 16
Increase.....			\$209,874 38
Decrease.....	\$26,542 66	\$236,417 04	
	Gross Earnings.	Expenses.	Net Earn'gs.
Aug., 1858.....	\$19,220 92	\$15,794 76	\$ 3,425 16
Aug., 1857.....	27,522 35	14,690 41	12,831 94
Increase.....		\$1,104 35	
Decrease.....	\$8,301 43		\$9,405 78
Jan. 1 '58, to Sept. 1, 1858.....	\$103,929 60	\$81,054 81	\$22,874 79
Net earnings of the Canal from Aug. 1, 1857, to Jan. 1, 1858.....			19,243 40
Net earnings of the Canal from Jan. 1, 1858, to Sept. 1, 1858.....			22,974 79
Net earnings of the Canal from Aug. 1, 1857, to Sept. 1, 1858.....			\$42,118 19

Messrs. Baring, Brothers & Co., London, notice a quiet market, and prices unchanged in American stocks. The only noticeable change is an advance of two dollars in Illinois Central shares, quoting them at 24 to 25 discount. The *London Times* notices sales on the 3d inst., at 24 and 23 $\frac{1}{2}$ discount. The circular of D. Bell, Son & Co., also notices the same improvement in these shares, and a generally quiet business in American securities.

RAILROAD IRON.

LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons
rails 49 lbs. per yard. 1,600 tons rails 55 lbs.
per yard. Also: several Locomotives of best manufac-
ture, of any required weight and adapted to any gauge
for sale by

H. H. GOODMAN & CO.,
No. 7 Wall st., N.

OLD STANE.

Railroad and Car Windings.

A. BRIDGES & CO.

(SUCCESSORS TO BRIDGES & BROTHER.)
Will continue the Railroad and Car Furnishing Busi-
ness, and deal in

Locomotive & Hand Lanterns,
ENAMELLED HEAD LININGS,
Brass and Silver Trimmings,
COTTON DUCK FOR CAR COVERS,
Portable Forges and Jack Screws.
Bolts, Nuts and Washers, Shop and Bridge Bolts, and
iron Forgings of almost every description, etc., etc., at
be OLD STAND.

64 Courtlandt Street, New York.

Orders for the purchase of Goods on Commission,
de from our regular business, respectfully solicited.
ALBERT BRIDGES,
Of the late firm of Bridges & Bro.
JOEL C. LANE

S. C. THOMSON & CO

MANUFACTURERS OF

PATENT PAD LOCKS,

For Railroad Switches, Merchandise Cars
Stores, Cemeteries, Iron Safes, &c.,

Cor. Railroad Avenue and Market st.,

1 n24 NEWARK, N. J.

WOODRUFF'S PATENT SLEEPING CARS.

AS NOW RUNNING ON THE LAKE SHORE AND
LITTLE MIAMI RAILROADS.

The attention of Railroads and Private Parties is
respectfully called to this new and much desired im-
provement in Railroad Cars.

Any information that may be desired, can be obtained
of the undersigned owners of the Patent.

T. T. WOODRUFF, Alton Ill.
G. R. DYKEMAN, O. W. CHILDS, Syracuse, N. Y.
J. S. MILLER, Litchfield, Illinois

JAMES FOSTER, Jun.,

Mathematical and Philosophical In- strument Maker.

S. W. CORNER FIFTH AND RACE,
Cincinnati, Ohio.

Drawing Instruments, Scales of all Kinds, Barome-
ters, Thermometers, Spectacles, Microscopes, etc., al-
ways on hand. Repairing attended to.

Norris' Locomotive Works.



PHILADELPHIA.

ENGAGED for many years in manufacturing Locomo-
tives, offer to Railroad Companies to construct of
any plan or size.

LOCOMOTIVES OF SUPERIOR QUALITY.
Our facilities for doing work have been largely increased
this year, and orders can be executed with dispatch.
Jy 27. RICHARD NORRIS & SON.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL.

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,

MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges
& Co., Fitchburg, Mass., having associated himself
with Messrs. Wellman and Russell, under the above
name, would respectfully solicit calls for any kind of
Passenger, Baggage, Post Office, Freight, Coal, Gravel
or Hand Cars.

Having had fifteen years experience in the business and
having secured the best of workmen from the Car Facto-
ry in Cambridge, Mass., I feel confident that perfect rat-
isfaction can be given in all work entrusted to our care.
We have now on hand the best of dry White-Oak
with which we think we can build Cars as cheap and as
well as any other establishment in the States.

Feb. 1612 JOSEPH DAVENPORT.

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The undersigned is prepared to furnish
SPECIFICATIONS, ESTIMATES, AND PLANS,
In general or detail of all kinds of
Steam Vessels, Engines, Boilers, Mill Work, &c.
Particular attention given to the superintending of
LOCOMOTIVES, TENDERS, CARS,
And Railway Machinery of every Description,
While under construction.

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General Agent for
ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES
METALLIC SELF ADJUSTING CONICAL PACK-
ING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles
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Consulting Engineer,
64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the
City of Washington, for the purpose of acting as
Consulting Engineer in the preparation of plans and
location of public works.

He may be consulted by companies upon all questions
appertaining to the cost, location or plan of construc-
tion of Railroads, Bridges, Canals, Water Works, or
the improvement of River Navigation, either at his of-
fice or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 298 H Street, Washington, D. C. apr12

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RAILROAD GUIDE AND ROUTE-BOOK (established
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No. 6) By "Frank Forister."

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METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis,
of Gowanda, Erie County, N. Y., is no longer an
Agent for Allen & Noyes' Patent Metallic Packing.
This power of attorney is revoked, and no acts of his
will be recognized by the patentees.

July 14, 1857.

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LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MA-
CHINES, Chair Seat Machines, Boring Machines,
Scroll, Chair-back and Swing Saws, Concave Fellow
Saws, Saw Mandrels, Turning Lathes, Dental Lat
Screw Cutters, Lithograph and Tinture Presses.

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BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

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WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

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THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
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Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Sup't Terre Haute & Richmond R. R.

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PATENT PORTABLE CIRCULAR S-W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

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Booksellers, Publishers, Stationers & Blank Book Manufacturers,
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1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-16th. Corby, Gossin & Co's make, for sale very low by
TRABER & AUBERG,
7 Public Landing.

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ON AND AFTER MONDAY MAY 10TH 1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

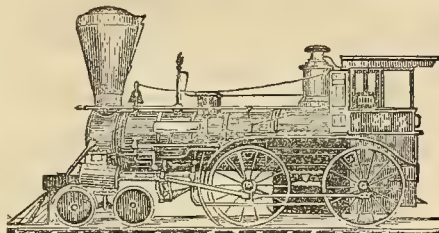
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The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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1858 1858.

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TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
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At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.

ACCOMMODATION TRAIN at 5:30 P. M., daily, (Sundays excepted,) for Seymour.

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MIDDLETON, WALLACE & CO.,
jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; a Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:50 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

For further information and Tickets, apply to the Ticket Office, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup't.

Racine, May 15, 1857.

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Union Works, Baltimore.

POOLE & HUNT,

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ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

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Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

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WALTER McQUEEN, Supt. Au16.1y

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

D. M. CARHART,
Box 1831, Cleveland, Ohio.

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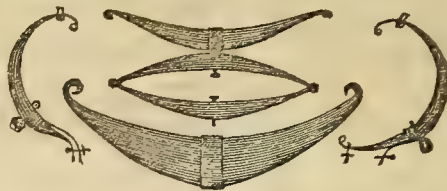
T. F. RANDOLPH & BRO.

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MCDANIEL & HORNER, LOCO-MOTIVE AND CAR SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

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U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

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EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
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CINCINNATI:

THURSDAY MORNING, SEPT 30, 1858.

Railroad Record

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SOUTHERN PACIFIC R. R. CO.

Dr. Jephth Fowlkes, President of the S. P. R. R. left Memphis, Tenn. on the 20th inst., for Marshall, Texas, on Company's business.

The Memphis *Bulletin* says, that the stockholders are supporting the policy of the new Board, by freely paying up installments, and advancing the required loan, and that paper hopes to be enabled, before long, to state that this great enterprise has been freed from all its embarrassments.

BUSINESS OF THE COUNTRY.

Looking generally over the business of the country for the past twelve months, the careful observer will come at once to the conclusion, that a great deal *less business* has been done this year, than in that previous, and not only this, but that the business, in relation to the resources of the country, is unusually and extraordinarily small.

A prudent man will also come to another conclusion, that this process of reduction is a very salutary one, and must result in a very great and very profitable increase, in coming years. A vast amount of debt has been paid off, and the estates of individuals are increasing.

The reduction of business in Cincinnati has been comparatively small; but that in the whole country has been very great.

The reader can form some idea of it from the following facts which we gather up from various quarters. The first to feel the reduction of business is the National Government, whose revenue depends on foreign imports. It is quite obvious, both in fact and in reason, that the importation of foreign goods must be greatly reduced, on the recurrence of commercial revulsions.

The following table will show what has happened in the way of business to the United States, for *ten months* of the period, to which we refer; for this Treasury Report dates till the 3d of June only, and the commercial period, of which we speak, comes into September.

Receipts and Expenses of the United States for the Fiscal Year Ending June 30.

	RECEIPTS.	
	1857.	1858.
Customs.....	\$63,475,905 05	\$41,789,620 96
Sales of lands.....	3,819,486 64	3,513,715 87
Miscellaneous	926,121 98	1,254,232 77
Treasury notes.....		23,716,300 00
Total receipts for fiscal year.....	\$68,631,513 67	\$70,273,869 60
	EXPENDITURES.	
	1857.	1858.
Civil.....	\$27,531,982 37	\$26,287,892 20
Interior.....	5,358,271 72	6,031,923 38
War.....	19,261,774 16	25,485,783 60
Navy	12,726,856 69	13,976,000 54
Old debt.....	503 21	5 00
Redemption loan of 1842.	516,539 58	613,270 81
Do. 1846.....	714,013 26	26,400 00
Do. 1847.....	1,000,000 00	1,759,950 00
Do. 1848.....	898,150 10	1,435,900 00
Redemption Texas stock	143,000 00	28,000 00
Creditors of Texas.....	639,253 24	38,788 42
Bounty land stock.....	400 00	225 00
Premium on stock.....	363,572 39	574,543 08
Interest on public debt.....	1,678,265 23	1,567,036 67
Payment of Treasury notes.....	100 00	3,659,300 10
Total expenditures.....	\$70,822,724 85	\$81,585,467 71

If the above figures be compared, it will be seen, that the Government (excluding on both sides the public debt) *increased* its expenditures \$3,400,000, and diminished its revenue \$22,000,000. In other words, it run behind *twenty-five millions of dollars*!

The actual loss, it will be seen above, was on customs due, which proves a *reduction* of duty paying importations to the amount of more than \$80,000,000. But, counting the Custom House business from the 1st of Jan-

uary, 1858, the gross imports till September 1, (eight months only,) was \$104,000,000 against \$174,000,000 last year. In other words, the falling off in foreign importations for eight months was full 40 per cent. No doubt, the falling off in the general business of the country was much less; but we may safely assume it at least 20 per cent. on the aggregate business. This is almost demonstrated in the following paragraph which we take from the *Railroad Journal*:

"Perhaps the best indication of the relative condition of the commerce of the country during the last, as compared with the previous year, is to be found in the receipts of the different railroads. Taking the returns of the earnings reported in the *Journal* during the year ending July 31, 1858, as compared with the previous year, we have the following result:

Earnings reported for year ending July 31, 1857.....	\$38,237,294
Do. do. July 31, 1858.....	29,611,111

Decrease.....\$8,646,180

These returns embrace the receipts on only about one-fourth of the mileage of all the railroads of the United States—and perhaps one-third of the total receipts. Estimating them at that rate, the whole earnings during the year ending

July 31, 1857, would be.....	\$114,771,893
Do. July 31, 1858.....	84,333,342

Showing a decrease of.....\$29,978,559

or nearly \$26,000,000 on the receipts of railroads in the United States."

This shows a reduction of railroad business of about 23 per cent.

Immigration from Europe has been very much diminished, especially to the Western States. Most of the foreign immigrants now remain in the Eastern States. We do not agree with many, that the reduced amount of immigration is necessarily any reduction of our wealth. If immigrants come in, it is several years before they do much more than support themselves, while thousands are absolute paupers.

Another cause of reduced business is our reduced crops; a fact which is real and not imaginary, and which presses on all the business of life.

CRIME AND ARRESTS IN THE U. STATES.

One of the most interesting branches of Social Science is, that which involves the administration of Criminal Law, both in its relation to the commission and punishment of crime.

In the very able and candid address of the Mayor of Baltimore, we have a statement of the *arrests* and classes of offences in the great Eastern cities of this country. This statement is a most extraordinary one; for it shows that in the five cities of New York, Brooklyn, Boston, Philadelphia, and Baltimore, containing nearly 2,000,000 of inhabitants, there have been 133,000 arrests for

offences against law! This makes a proportion of 1 in 15—a very great proportion. The details of these arrests and offences, we give below.

In estimating the population of the various cities named, the United States census for 1850 is taken as the basis for the cities of Baltimore, Philadelphia, and Boston, calculating the increase from 1850 to 1857, in the same ratio that the census shows those cities did increase from 1840 to 1850. In the cities of New York and Brooklyn, the New York State census for 1855 is taken, and the calculation made for the increase from 1855 to 1857, in the ratio of the actual increase from the United States census of 1850 to the State census of 1855.

	Pop. in 1857.	Ratio.
Baltimore.....	235,000	1
Philadelphia.....	580,000	2.51
New York.....	670,000	2.85
Brooklyn.....	220,000	.94
Boston.....	170,000	.72

In the analysis of the various police reports, those of Baltimore, Philadelphia, and Boston, are taken from the entire year, last past, and the cities of New York and Brooklyn are estimated from the reports for the five months of the year, this is believed to be very favorable to both those cities, as the reports for the last three months, if adopted as the basis of calculation for the entire year, would show 12½ per cent. more in the aggregate of arrests and 20 per cent. more in the higher grades of crime.

The total amount of arrests for the year, are viz:

	Relative ratio to Pop.	
Baltimore.....	8,949	1
Philadelphia.....	24,444	1.09
New York.....	64,426	2.52
Brooklyn.....	16,830	.2
Boston.....	19,693	2.96

They are divided into four classes, viz:

1st. Crimes against person—murder, assault with intent to kill, shooting, stabbing, rape, perjury, assault and battery, etc., etc.

	Ratio.
Baltimore.....	1,862
Philadelphia.....	2,723
New York.....	9,524
Brooklyn.....	2,166
Boston.....	1,357

2d. Crimes against property—arson, robbery, burglary, larceny, forgery, fraud and stealing generally.

	Ratio.
Baltimore.....	668
Philadelphia.....	2,118
New York.....	8,858
Brooklyn.....	1,998
Boston.....	2,503

3d. Crimes against the peace—rioting, fighting in the street and disorderly conduct generally.

	Ratio.
Baltimore.....	5,057
Philadelphia.....	12,532
New York.....	18,052
Brooklyn.....	3,534
Boston.....	3,805

4th. Crimes against morals—intoxication, Sunday gambling, breaches of law, ordinance and morals generally.

	Ratio.
Baltimore.....	1,362
Philadelphia.....	7,071
New York.....	25,992
Brooklyn.....	9,132
Boston.....	11,628

Philadelphia falls below Baltimore in the 1st class; Brooklyn in the 3d class is the only other point that falls below Baltimore.

The Chief of Police in Boston, reports in the list of miscellaneous work done by the police, the number of disturbances quelled with-

out arrest to be 5,226!!! The watch house lodgers to be 10,913.

He also reports that notwithstanding the stringent laws of Massachusetts on the subject, there are 1,985 public shops and saloons, and 245 houses of bad reputation where liquor is publicly sold in small quantities, in addition to grocers and others who supply families and sell it privately to be drank on the premises.

BANKING OPERATIONS

Banking operations are to most persons an absolute mystery. Some persons, intelligent too, suppose a bank always has money; because it can always issue notes. They apparently do not reflect, that the bank must pay these notes, as private people pay theirs. Again, they suppose, that because it is a bank, it is inexhaustible, and feel offended, if they can not borrow when they please.

Other persons, on the other hand, think a bank ought never to loan any part of its deposits; because, they are put there for safe-keeping, and what right has the bank to loan other peoples' money? Then, we should say, why should it be at the trouble and expense of keeping other peoples' money?

Other persons suppose a bank has great privileges granted them, because they have a charter, and can issue notes. Now, the only privilege they have is, that of issuing engraved notes, which, by usage, pass from hand to hand as money. Any individual can open a bank, receive deposits, loan money, and issue notes, not engraved. In the great cities, like New York, they have practically no privilege; for, they can not keep out their engraved notes to any considerable extent. Their charter is no more than the charter of a manufacturing company.

The privilege of issuing engraved notes is an important thing to country banks, because they have comparatively few depositors; and depend largely upon their circulation for their dividends. Nevertheless, no more is made by the circulation of banks than the difference between the amount of circulation, and the amount of coin, kept to redeem it, which ought to be at least one-third. Thus the Adams Bank has \$150,000 notes out, and \$50,000 coin on hand; then it makes a net profit of the interest on \$100,000. If the capital of the bank be small, and the expenses small, the net profit would be pretty good.

We have an illustration of banking on a large scale in the Annual Report from the Banks of New York, printed by the Bank Comptroller for June. It will be interesting to trace out briefly some of their operations.

Number of Banks	296
Whole amount of Loans, Discounts, Promissory Notes, Bonds, etc.....	\$310,566,171
Whole amount of Capital.....	\$109,340,541
" " Circulation.....	24,079,193
" " Specie.....	162,760,909

Aggregate means.....\$396,179,643

Cash on hand.....\$40,031,333

Of the \$186,000,000 of circulation and deposits on hand, the banks retain in cash about \$40,000,000 or less than one-fourth, of the residue, they have loaned \$100,000,000, and the remainder is *in transitu* between banks, or in real estate. Now, what is the average profit of the banks on the above showing?

New York interest (seven per cent.,) the income \$14,700,000. The aggregate expenses is not more than \$1,500,000; so that these banks must make about \$13,000,000 profit per annum. Their capital is \$109,340,000. The banks of New York, therefore, make at least 12 per cent. per annum; and it is the best business in the United States, at the present time. We say, they make this at least; for, we have left out of view, many ways of making money, besides that of simple interest; for example, the high rates of exchange from point to point. These incidental resources of bankers make up more than all the losses they incur, where the business is prudently conducted.

AMERICAN AND ENGLISH RAILROADS.

We recently published some remarks upon this subject, in which the errors of our roads were pointed out, and especially in relation to the great relative expense at which they are run. This, we think, is a just criterion. We showed, in that article, how these expenses were increased; and, at the same time, in some respects only *apparent*, not real. This is proved by the well known fact, that in many of our roads, the *permanent* improvements are charged to the expense account. While, therefore, we admit that in many things, American railroads are not managed so well as the English, we think also that in some particulars great injustice is done in the article of the New York *Evening Post*, to which we referred. For example, take the following:

At last we have the data by which to prove what we have long suspected, that the reason why American railroads have so rarely proved remunerative, is that they are badly built and unskillfully used; that the engineers who build our roads are generally incompetent men, and the working of the engines is usually committed to a class of mechanics wholly unequal to the exercise of a wise and effective economy.

Now, so far as regards the engineers and mechanics, we do not believe one word of this. In fact, we *know* the contrary. There are certain general facts which will disprove this broad assertion: America is exactly the country, in the world, where *practical engineering* is most exercised and best understood. No well informed man will put the engineers graduated at West Point below those of any other school in the world. Now, a large number of these have gone into the civil service, and many of them have been employed on the railroads. If the *Evening Post* will point out what roads it refers to, and what

men it means, there may be justice in its remarks; but, in the wholesale way in which the proposition is laid down, there is no truth in it. Who was selected as the best Civil Engineer on railroads by an impartial umpire, the Emperor of Russia? Mr. WHISTLER, an American Engineer. Who was selected to succeed him? Mr. THOMPSON, another American Engineer. We give these only as examples. With those exceptions which must always occur, in the employment of a large number of men, in doing an immense amount of work, there is not even a shadow of truth in the proposition of the *Post*.

So, also, of the Mechanics. Can it be supposed, that in a country where iron is the most used; where ship building is carried to the greatest extent; where most skill has been exhibited in the invention of machinery, that the Mechanics employed on railroads are inferior!

On the face of it, this assertion is improbable. American mechanics have not fallen short in any competition with foreigners. The great Agricultural machinery exhibited at the Worlds Fair, extorted universal admiration. The superiority of Europe was not in the useful, but the ornamental part of mechanics. No complaint is really made of the capacity of our mechanics. The idea is mere moonshine. The fault of our railroad system lies wholly in its financial management. And where did this come from? Exactly from those financial gentlemen who originated this very article in the *Post*. But, supposing that we have occasionally a bad engineer, or a bad mechanic—what mischief has he done, compared with the wholesale loss occasioned by an English engineer, as thus described? We quote from the correspondent of the *American Journal*:

It is easy to see why English railroads have cost so much. In their construction, their probable income has exerted no influence over the amount expended upon them. A road is commenced. An engineer takes charge of it, and constructs it according to his ideas of what a road should be. Enormous sums are wasted in Parliamentary and legal expenses, in extravagances of one kind or another, and in immense profits paid to contractors. It often happens both in England and America, that the actual amount expended upon a road makes only a small portion of its capital account.

This is the whole truth. An English engineer costs much more than an American; because he has much more to spend. But the writer hits the nail on the head, when he speaks of "extravagances," and of "immense sums paid to contractors," only he should have added—Brokers and Usurers.

While the *Evening Post* is censuring engineers and mechanics, let him read the following paragraph from the same correspondent:

While the United States have a great advantage over this country in the construction of railroads, I think that reforms in their

management will also take place much more promptly there than in England. In the latter country, the social position of a gentleman will often place him at the head of a railroad. For illustration:—The chief executive officer of the London and Northwestern Railroad, a road which has cost \$165,000,000, is the Marquis of Chandos, a most excellent person and universally esteemed. But it is not too much to say that he has no training in the duties that should belong to such a position. He is probably incompetent to decide upon the qualifications for his duties of a single subordinate officer. To see the incongruity of such relations, we have only to imagine this gentleman to be transferred from his present position to the charge of the largest iron establishment in Wales.

The truth is, that at bottom, the English management is not as good as ours, except in the practical management of the financial department. In that department, we are unquestionably inferior to Europeans; but, inferior only because we have not learned the economical habits which only age and experience can give.

TREATIES WITH CHINA.

The treaties concluded with China, by Russia, England, France, and the United States, may be regarded, as among the most important events of the day, and as they relate to the extension of commerce, we give the following summary of their substance from the *New York Times*:

To take the treaties in the order of negotiation, we must begin with the Russian Convention of May 28, repeated and confirmed by a subsequent instrument, signed on June 13. Its main points are, the residence of a Russian Ambassador at the capital; the continuance of the present college of Russians in that city, and the cession of the upper region of Manchouria. This cession has been stated as reaching to the left or northern bank of the Amoor. It appears, however, to approach still nearer to the Chinese wall. A usually well-informed correspondent of the *London Times* tells us, "That part of the right bank is to remain in the possession of Russia which is between the confluence of the Shilka and the Argun, and the spot at which a river called Usuri falls into the latter. The Chinese are to enjoy the privilege of navigating the lower Amoor, and the Russians will be at liberty to trade on the Songari." It will be seen that in direct gain, the Russians have the better of their competitors.

The American Treaty is the next in order, having been celebrated on the 18th of June. This obtained direct correspondence with the Imperial Prime Minister; a right of visit and temporary sojourn of an American envoy at Peking; the addition of Swatow and Taiwaa to the existing category of open ports; the exclusive jurisdiction of the United States authorities over its own citizens; the toleration of Christianity, and the protection of Chinese converts. The principal trait, however, was the closing article, which embodied comprehensive provision that all rights, privileges, and powers granted to any nation, its merchants or subjects, whether political, mercantile or otherwise, and not conferred by this treaty on the United States, shall at once inure to the benefit of the United States,

its peculiar functionaries, merchants or citizens.

The French and British Treaties which were drafted, and on the eve of execution, at the latest advices, are reported as embodying the following leading points:

"Expenses of war to be paid to the English and French—about \$16,000,000 to the English, and \$6,000,000 to the French.

"Money to be paid out of Canton duties, which are to be received by foreigners till the amount is liquidated, and Canton still held as a material guarantee.

"Each Power to have an ambassador at Peking, but he is not to reside within the walls.

"Each to have a consular agent at Tientsin.

"The navigation of the Yang-tse-Kiang to be thrown open.

"A Chinese mission to England and to France, but no representative to be considered as a permanent resident.

"The addition of Hang Chaw, Swataw and Taiwaa to the list of open ports."

WHY AMERICAN RAILROADS HAVE PROVED POOR PROPERTY.

We have shown on a previous occasion what a wonderful disparity exists in the relative expensiveness of American and foreign railways. We propose to-day to show in what features of railway management this disparity has its origin. The report of Messrs. Colburn and Holly demonstrates the fact that the English and French railways uniformly have more substantial and better drained earthwork than is usual in American roads. The formation-level is wider, the slopes flatter and generally grassed down, and the ditching, ballasting, and drainage is more thorough than with us. The English rail is stiffer than ours, being generally five inches deep, where the American standard is three and a half inches. Their rail joints have some support, independent of the tie, whereby the iron is saved and resistance diminished. The sleepers on these lines are larger than ours, of more uniform sizes, and are chemically preserved to last fifteen years. In looking at the cost of permanent way alone, independent of any other item, we find it is about the same, mile for mile, in England and America; so that in analyzing the cost of lines in the two countries, we are led to infer that the difference in total expense lies more in the direction of management and working. This inference being well based on indisputable data, opens an aspect of the great question of the comparative value between European and American railway policy and engineering, which our railway directors and shareholders sooner or later must grapple with.

In estimating the comparative economy of the two countries, we must not forget that the physical features of England are less favorable to railway engineering than those of the United States. There are no long water-courses to follow up, and no great table lands to carry the lines by long levels, so that but little has been done by nature to facilitate the construction of lines in that country. In these respects nature has favored the United States to an unusual extent. There are about seventy miles of tunneling in Great Britain, or the 124th part of the whole length of the roads. The cost has averaged about \$5,000 per mile. In the United States, with 26,000 miles of line, there are only 14½ miles of tunneling; so that nature has done much for us

to diminish cost of both making and working our roads. In the engineering department, the charge has been in England from five to ten per cent. on the cost of work done: the average being not less than \$5,000 per mile. Of 8,718 miles of line, but 2,511 miles, or 28.8 per cent., is single track, the remainder being double and tripple track. Massachusetts has about 75 per cent. of single track. The stations average about 2½ miles apart in the United Kingdom, which has upwards of 200 cities and towns, each having a population of 10,000 and upwards, fifty having 50,000 and upwards—and nearly all these are reached by the immense net work of lines which is spread over the kingdom, there being sometimes four and five large and expensive stations in the same town.

The comparative cost of permanent way is as follows:

English—one mile, 70 pound rail—total cost..	\$15,806 78
American—do 60 do do ..	14,532 00

Difference..... \$1,274 78

The English is a thoroughly first class road, with ample slopes and ditches, deep ballast, a 70 pound rail, thoroughly fish-jointed, and the ties preserved to last fifteen years.

The American line has scanty earthwork, thin ballast, a 60 pound rail, open joints, and the ties destined to decay in from five to seven years, certain.

Nothing can be more obvious from these statements, than the fact that an imperfect road entails increased expenses in everything. Its own repairs involve extra repairs in engines and cars, and increase the consumption of fuel and oil, and wear and tear in general, to meet the increased resistances.

The average working expenses are over 70 cents per mile in this country. Evidently this might be reduced by judicious management, to 50 cents per mile run, or about \$800 annually per mile of road. The improvements should not increase cost by more than \$3,000 per mile. The interest on this at the highest rate would be \$300, giving clear saving of 11 cents per mile run.

In comparing the working of European and American lines, the economy of the former is confined to their maintenance, the average on English lines being less than one-half the average on the New York and Massachusetts lines. But the key to the whole subject lies in the consumption of fuel, measured by quantity and not by price; this item being about one-half more per mile run on the English and French lines, than on the American. The consumption with a given load is a measure of the resistances overcome, and these represent the wear and tear of machinery. Hence, the economy of working must be due to superiority of original construction, and to the superior running condition maintained. Facts confirm this inference; for the duration of rails under a given traffic is twice as great on English as on American roads; and the duration of sleepers is also doubled; while the repairs of road-bed, for the former, are trifling as compared with those required for the latter. This brings us at once to a comparison of the construction of foreign railways with that of our own; and the difference is seen, not in the plan, but in the execution and character when finished. Obviously, the earthwork is the foundation and support of the whole superstructure, and, as such, must be uniformly firm. European engineers pay the greatest attention to this matter, and make all other considerations subservient to it.

The face of the slope is strongest when curved so as to be flattest at the base, where

the pressure is greatest. This approaches the analogy of nature, and is approximated in all earth-works by the effects of time in gradually settling and washing down the slopes. This form is occasionally given in English railway earthwork. The transverse slopes average much flatter than on American lines; but although flatter, they are protected by grassing, which will not thrive on the ordinary steep slopes of American lines, and they are better drained than is usual with us; thus the durability of the former lines is double. The English slopes vary from 1 base to 1 vertical, even till they reach 4 to 1, which is generally made of stratified clay in cuttings over fifteen feet high. The slopes of New York are as 1½ base to 1 vertical, on all roads except the Troy, Union and Ogdensburg, where the slopes are 2 to 1. Observation and science will alike show, that in our earth work, including drainage, more than in any other single detail of our construction, are American lines deficient. It is the weak point of our system. Whoever is anxious to discover the reason why the average cost of maintenance of our lines is 150 per cent. greater, for the same mileage, than that of the railways of England, may search hopefully for it in the condition of our road beds. No capable engineer will deny it. In railway construction, as in morals, there is a wide difference between what is and what ought to be. The support of a road being firm, and the fastenings ample, the tracks well trimmed and smooth, and the trains running quietly, what should hinder it from being as economically worked as a European line?

Again: The best railways in the world—those which do the most business at the least cost—are the best ballasted. The French double track roads have averaged over \$6,000 per mile for ballasting, and are maintained under their current traffic for \$2,000 less per mile annually, than the cost for the same mileage here. This ballast once on, will not lose more than one or two inches a year.

In this respect American lines are generally inferior. We will illustrate by citing one of the most important railroads in the country—the New York & Erie—its whole length having been in average use for eight years, and having an abundance of gravel along its entire route. The engineer reports 169 miles at present unballasted, and 263 miles but half ballasted; 1,623,000 yards of ballast being now required to put the road in good order. He also estimates that the increased wear of locomotives alone, above what would have been incurred with a good track, was sufficient in the two years ending September 30, 1857, to have paid for 1,000,000 yards of ballast. The repairs of cars were also \$140,000 more, in but one year, than he estimates would have been sufficient with a road in good order. This is independent of the repairs of the road itself, and of its bridges, fences and build ings, all of which averaged twenty-eight cents per mile run by trains, \$856,453 for the whole road. And to make this statement complete, it is to be said that iron for 180 miles, and sleepers for 200 miles, still required immediate renewal.

Economy alone dictates thorough ballasting. The great railway of the world—the London & North-western—cost, in 1855, but one-fourth as much per mile run for maintenance of way as the great road of America—the New York Central. Had the cost of the latter been only double that for the former, the saving would have been \$418,281, equal to a

dividend of one-eighth per cent. on the entire capital stock of the company.

The considerations which have naturally arisen from this investigation of our railway system, show to how great an extent it is our policy and interest to study thoroughly a question so vital to the success of American railroads as the economy of thorough ballasting.

INTERESTING RAILROAD DECISION.

The *Legal Journal* gives a full report of the case of *Courroy's Administrators vs. The Pennsylvania Railroad Company*, tried before the District Court of Allegheny, Pennsylvania. The opinion of Mr. Justice Hampton brought out the following points:

The Act of Assembly of 15th of April, 1851, allowing the personal representatives of a deceased party to prosecute suit for injuries to the person by negligence or default, is not repealed by the Act of 26th of April, 1853, so far as to effect proceedings under it before the passage of the latter Act.

A husband suing under the Act of April, 1851, as the administrator of his wife, for the injuries to her person, resulting in death, may amend his narr, in accordance with the provisions of the second section of April, 1853. The fact of describing him as her administrator would not vitiate the writ, but would be treated as mere surplusage.

Those entrusted with the management of a Railroad are bound to exercise the utmost care, skill and diligence in relation to their passengers and the property committed to their charge. But they are only responsible for the direct and immediate consequences of errors committed by themselves.

Where it can be shown that an injury would not have happened except for the culpable negligence of the party injured concurring with that of the other party, no action can be maintained.

The opinion of the Court details the material facts of the case. The charge of the Court was delivered by

HAMPTON, J.—The plaintiff, with his wife and two children, took passage on the emigrant train, on the defendant's road, from Philadelphia to Pittsburgh, in April, 1854. They arrived at Altoona on Sunday morning, when the trains was placed on the side track, as shown by the diagram exhibited to the jury, where it remained until about noon the next day, when it was dropped down to its place for starting west. The Holdersburg train came up on its branch road from that place, on time, as it is alleged, and after entering upon the main track, backed up the same past the emigrant train, at some distance from it; and the moment the plaintiff's wife, who had left the latter train but a few minutes before, was crossing or walking along the main track, she was knocked down by the backing train and instantly killed. John Courroy, her administrator, now brings this action to recover damages for the alleged negligence of the defendants, under the provisions of the act of 15th April, 1851. (*Dunlap 1145.*)

The plaintiff's counsel contend that the defendants' by their officers, were guilty of such negligence in the management of the backing train, as will render them liable in this action.

The defendant's counsel take defence on three grounds. 1st. That the plaintiff can not recover as administrator of the deceased, because, as they allege, the act of April, 1851, was virtually repealed by the act of April 26, 1853. And 2d. That the death of the plaintiff's wife was not caused by any negligence on their part, but by the want of proper care and caution on her part. And 3d. That if there were any negligence or want of care on their part, yet she was guilty of negligence also, which would prevent a recovery in this case.

First, then, as to the repeal of the act of 1851, which embraces the first ground of defence. This injury occurred in April, 1853, and the present action was brought to July Term of that year. Under the provisions of that act, at the time this suit was instituted, the plaintiff had a right to sue as administrator of his wife, and the only question is whether that right was taken away by the act of April, 1853. The act of 1851 is not repealed in express terms, nor do I think it is so by implication, so as to affect proceedings commenced under it, before the passage of the latter act. The intention of the Legislature in passing the act of 1853, seems to have been merely to limit the right of action to the husband or widow, children or parents of the deceased, and consequently to prevent the damage that might be recovered from distribution among creditors. But if this were not so, the plaintiff would be allowed to amend his Narr, in accordance with the provisions of the second section of the act of April, 1853, and as the plaintiff would have the right, under the first section of this act, to sue as the husband of the deceased, the fact of describing him as her administrator, would not vitiate the writ, but would be treated as surplusage. This has been repeatedly ruled in Pennsylvania and elsewhere. This ground of defence, then, is not available.

The second and third grounds of defence go to the merits of the case, and if sustained by the evidence must defeat a recovery in this action.

This branch of the case raises two questions. 1st.—Was the deceased guilty of any degree of negligence which contributed to the injury complained of? If so, the plaintiff can not recover, no matter whether the de-

defendants were guilty of negligence or not. But if there was no such negligence on her part—then, d. Was her death caused by any culpable negligence on the part of the defendants? If so, the plaintiff will be entitled to recover. But if there was no such negligence, then the defendants are not responsible, and the plaintiff will not be entitled to recover.

What constitutes culpable negligence in any particular case, must always depend upon the facts and circumstances attending the act or injury complained of; so that no invariable rule can be laid down which will be applicable to every case; but some general rules may be stated which will enable the jury to arrive at a correct conclusion in determining the facts disclosed by the evidence. There are usually considered three degrees of negligence, viz: gross, ordinary, and slight. Gross negligence consists in the omission of that care which even inattentive and thoughtless men never fail to take of their own property. Ordinary neglect is the want of that diligence which the generality of mankind use in their own concerns, that is, of ordinary care. Slight neglect is the omission of that care which very attentive and vigilant persons take of their own goods, or, in other words, of very exact diligence.

It is well settled that those entrusted with the management of a railroad are held to the strictest vigilance. They are bound to exercise the utmost care, skill and diligence in relation to their passengers and the property committed to their charge. They are responsible for every injury caused by any species of negligence, however slight, which any of their agents may be guilty of. But they are only responsible for the direct and immediate consequences of errors committed by themselves. They are not insurers against the perils to which a passenger may expose himself by his own rashness or folly. One who inflicts a wound upon his own body, must abide the suffering and the loss, whether he does it in or out of the cars, and there can be no recovery for an injury caused by the mutual default of both parties. When it can be shown that it would not have happened except for the culpable negligence of the party injured concurring with that of the other party, no action can be maintained. A railroad company is not liable to a passenger for an accident which the passenger might have prevented by ordinary attention to his own safety, even though the agents in charge of the train are also remiss in their duty. Such is the doctrine laid down by C. J. Black, in the Railroad Company vs. Aspell, 11 Harris, 149.

This is not only the last case reported on this subject, but it is a summary and comprehensive view of the law applicable to this case.

The principles to be extracted from all the cases, and which you will apply to the evidence in this case, are the following:

1. If the death of Judith Conroy was caused by her own rashness or folly, or by a want of proper care, caution and prudence on her part, the plaintiff can not recover, and the defendants will be entitled to your verdict.

2. If the negligence or carelessness of Mrs. Conroy, concurring with that of the defendants, caused her death, the plaintiff can not recover.

3. If the defendants used all the care, skill, caution and prudence that human foresight and sagacity could suggest, they are not responsible, and the plaintiff can not recover, although there may have been no negligence whatever on the part of deceased. It would then be, one of those unfortunate, but unavoidable accidents for which no one can be held accountable.

4. If the deceased was not guilty of any negligence, and if her death was caused by any want of care, caution or prudence on the part of defendants, their officers or servants, then the plaintiff can recover.

To which instruction so given the counsel for both parties did then and there except and pray the court to seal this bill of exceptions, which is done accordingly.

M. HAMPTON, [SEAL.]

The jury rendered a verdict for defendants. A motion was made for a new trial, which was overruled by the court. Plaintiff's Attorney also took exceptions to the charge, but the case was not taken up.

WHEAT CROP AND EXPORT.

The state of the crops this year and the quantities which can be exported from the United States are now a matter of inquiry. It is confidently stated that the crops in England and western Europe are very abundant, the prices being lower by one-third than for either of the last five years, while in the United States it is alleged that the crops have failed. The extent of crops in the United States and the degree of failure, as well as the quantity on hand in the interior, are all matters of the merest conjecture, and those who undertake assertions in relation to them are merely playing upon the credulity of their hearers. All that is or can be known in relation to the crops are the comparative receipts and exports at leading points and the prices. The surplus which can be spared from the United States has of late years apparently increased, and by inference the crop has been

larger. We may make a table of the average annual price of wheat in England on Michaelmas of each year, according to official returns on which the tithes are regulated; the export of wheat and flour from the United States, expressed in bushels of wheat, and the average annual price of flour in the United States, according to the Treasury tables:

	English average.	U. S. export.	Price flour in U. States.
	s. d.	bus.	
1852.....	39 10	18,600,680	\$4.37
1853.....	45 7	18,958,990	4.94
1854.....	72 10	28,148,520	9.25
1855.....	71 10	7,821,584	9.50
1856.....	73 1	25,568,007	8.34
1857.....	59 2	33,146,196	6.97½
1857—estimate.	48 00	25,000,000	5.50

In 1852 and 1853 the United States were exporters at low prices, but the war raised the prices, aided by deficient harvests here, which even at the high rate which ruled in England in 1855, cut down the export two-thirds. Since then railroads, migration, and good harvests have combined to enhance the supply, until an export of 33,146,196 bushels out of the crop of 1856 did not sustain prices, which have continued to fall until they were \$4.25 in New York, notwithstanding that the stagnation of business has kept back large supplies.

If the crop of the United States in 1856 was 143,000,000 bushels, as was likely, a consumption of 3½ bushels per head, the usual average, would have taken 94,500,000 bushels, seed 16,000,000 bushels, and export as above 33,146,196, would complete the crop, leaving the usual quantity, whatever that might be, on hand. In the year 1858, the quantity exported has been large, according to the returns made up by the brokers. The exports to Great Britain and Europe were comparatively as follows:

FROM SEPTEMBER 1 TO AUGUST 31, 1857.		
	Flour.	Wheat.
To Great Britain.....	863,170	7,567,001
To Europe.....	433,314	2,875,653
Total.....	1,346,514	10,442,654
1858.		
	Flour.	Wheat.
To Great Britain.....	1,300,906	6,658,639
To Europe.....	303,100	391,428
Total.....	1,604,006	7,049,067

Reducing flour to wheat gives 15,269,097 bushels against 17,175,224 bushels same time last year, and about 17,000,000 went to South America and elsewhere. It is, however, known that most holders of grain of the crop of 1857 would not sell, because of the low prices, and therefore an unusual quantity of old grain is in the country. The export of wheat of late years has been, as we have seen, nearly 25 per cent. of the estimated crop. If that quantity is retained in the country by good harvests abroad, it will fully compensate for a deficit of 25 per cent. in the yield. But the crops was much larger than the quantity named, as is proved by the fact that although 25,500,000 bushels were exported in 1856, and 33,146,196, the largest amount ever exported, went in the following year 1857, at a time when the country was apparently prosperous, and the consumption, unchecked by hard times, fell nearly \$1.50 per barrel. In the past year following these large exports, the price has again fallen, although 25,000,000 bushels have gone abroad and unusual quantities have been withheld from market. It is evident from these facts that the breadth of land sown and the quantity produced, has gone far ahead of most estimates upon the subject, and the loss by the bad harvests of the present year will not suffice to maintain prices in the face of the small foreign demand.

MINING A THOUSAND YEARS AGO.

In the seventh, eighth and ninth centuries, lead was, it appears, used in covering buildings, and found at home, but the Anglo-Saxons wholly neglected the tin mines, or employed "Arabs or Saracens" most probably Germans, in them. There were iron works near Gloucester in the time of Edward the Confessor, and which, in all probability, had been kept up from Roman times. The city of Gloucester paid him, among other things, 36 dicres of iron, each of 10 bars, and 100 rods of iron drawn out for the nails of the king's ships, or iron rods wrought to a fit size to make nails. In 1153 a silver mine was worked in Cumberland by King David. In 1296 the miners in Devonshire were either too few in number, or not sufficiently skillful, for this year 337 miners were brought from Wapentake or the peak, in Derbyshire, to Martinstowe, who fined and cast into bars 704 lbs. weight of silver. In the next year 341 miners, brought from the same place, 25 from Wales, and other natives of the country, were employed, but the quantity of silver raised is not stated. In 1330 Milan steel was celebrated for cutlery and armor. Froissart mentions that of Bordeaux also as excellent for armor, and another says that it was equally famed for swords. In 1354 no iron was manufactured in England. Parliament, to prevent its rising in price, enacted that none, wrought or unwrought, should be exported, under heavy penalties, and the dealers were subjected to the inspection of the justices. During this and the succeeding century the market was supplied from Germany and Spain. In 1414, though tin and lead had been wrought in England from early times, the English miners were not considered so skillful as those of some other countries where the art had not been so long practiced. Henry the VI. having failed in his attempts to obtain gold and silver by the art philosophical, brought over in 1430 Michael Gosselyn, George Harbryke, and Matthew Laweston, three famous miners, and 30 other miners in their company from Bohemia and Hungary, superintend and work the royal tin mines, and instruct the Cornwall men in their art. In 1478 the art of making gold by an occult process was still cherished at court, Edward IV. granting a license to John Frensh "to practice a true and profitable conclusion in the cunnynge of transmutac'on of metals to our prylyte and pleaseire." In 1548 forging gaddes to imitate steel was prohibited: "Iron gaddes, called Bilboa iron, like to the fashion and manner of gaddes of steel, whereby the greatest part of edge tools that have been made of them have no value or goodness." This was apparently in imitation of the Spanish gaddes. In 1564 Queen Elizabeth granted to two foreign miners, Houghsetter and Thurland, whom she had brought over, a patent to search for mines and ewers of gold, silver, quicksilver, and copper, in eight counties, and to convert the proceeds to their own use, with the reservation of a certain portion to the Queen. They were to make compensation in certain cases to the owners of land, and were not to dig or undermine houses or castles. All persons were prohibited digging for any kind of ore without the license of Houghsetter. This German established copper works at Keswick, in Northumberland. In 1565 the patentees were incorporated into a company. They found an abundance of rich copper ore, which for many years afforded great profit to themselves and the nation, until by the death of the first German immigrant workman, and

neglect of continuing the stock, and want of fuel, the works greatly languished. The silver mines worked by this company were situated on the site of the old Roman works at Skibber Cned. These were erected by Houghsetter, and brought large sums to the company, and 150 years after the name and family were distinguished in the district. In 1566 a patent was granted to Cornelius de Vos, a Dutchman, for making "allom and coppers," and Humphreys and Shute received a patent to dig and work all mines and minerals, "except allom and copperice," and subterranean treasures not mentioned in the patent of Houghsetter. In 1585 it was decreed that no new iron work should be erected in Kent, Surrey, or Essex, on account of the destruction of the wood, and increasing scarcity of fuel. In 1588 a license to dig for tin in Cornwall was granted to Sir W. Raleigh. From 1590 to the present time mining has been continuously progressing, the last official returns published stating the value of the minerals raised to be nearly 40,000,000*l* per annum.—*London Mining Journal*, Aug. 21.

Texas and her Railroads.—Value of her Railroad Bonds.

Some of our exchanges have, says the Houston (Texas) *Telegraph*, now and then, thrown out the idea, that the money loaned to Railroad Companies by the State, would never be repaid by them, from the fact that their profits would never enable them to do so. We long ago discarded this idea on general principles, intending, at the earliest opportunity, to take the Central road as a basis, and enquire into the probabilities of the matter. The closing of the commercial year is a convenient time, as it is the closing of the second years' operations of this road, to make this examination. In another part of this paper we give the earnings of this road for two years, which we have been kindly permitted to copy from the company's books, and we will here state that we regard the Central road as a very fair basis for calculations, as it will be found when all the roads now projected are built, the second or third best paying road in Texas. The cost of operating this road is not far from 50 per cent. of the gross earnings.

Let us suppose now that its earnings for one year from this time, on the fifty miles completed, shall be two hundred thousand dollars,—less by \$26,894 78 than we are justified in expecting by the comparison referred to, and that the net profits are \$100,000. This road is indebted to the school fund now \$300,000, payable in 1867 and 1868, with six per cent. per annum interest, and two per cent. per annum sinking fund. The payments, then, which it is required to make to the State this year, are \$24,000. Besides this, it has out \$125,000 seven per cent. bonds, whose interest is \$8,750, leaving a surplus on one year's operations of \$67,250 to be applied to its construction ahead and the payment of other debts.

But the State holds a first mortgage bond on the whole concern, and consequently, so far as the school fund is concerned, and the value of the company's bonds there held, it is only necessary to ask whether, at forced sale, it would bring \$300,000? In other words, is a growing business that now pays a clear profit of \$100,000 per year, worth \$300,000 outright? The question answers itself.

The fact is, if these bonds were to be placed in market to-day, they are better worth par than almost any other bonds that are in the market, and we regard the school fund as better invested in them by far than it could otherwise be.

This being the case, and there being a still greater demand for money, to be applied to further extensions and buildings of roads, it

becomes important to enquire if there is no practicable way of adding to the school fund. This question is now engaging the minds of many of our financiers, and we do not doubt some practical and advantageous results will, ere long, be arrived at.

Grand Rapids and Indiana R. R.

This community feels a deep interest in the success of the great enterprise, indicated by the caption to this notice, for by its completion, we are to have a direct line of railroad with Mackinaw, and when the Cincinnati road is completed, which we look forward to with confidence, this city will be the centre of another of the important railroad lines of the country.

The Grand Rapids & Indiana Railroad, we learn from Dr. Jewett, of Lima, one of the directors, is progressing with its work very satisfactorily, to all concerned. From Wolcott Mills, north to La Grange, the road bed is about half graded and about ninety men are employed on the remainder of the work. From La Grange to Sturgis the whole is about finished up and ready for the iron. From Sturgis to Kalamazoo, about half of the route is graded.

From Kalamazoo to Grand Rapids—forty-eight miles—a good force is employed on the work. From the latter place to Muskegon River, a distance of about fifty miles, nearly eight miles of this is graded, and a good force employed on the work. Between Wolcott Mills, in this State, and Muskegon River, in Michigan there is altogether a force of about five hundred men employed. All this is encouraging, for it argues well for the energy of the directors who have the management of the road, and gives promise of an early completion of the whole enterprise.—*Ft. Wayne Republican*.

Pittsburg, Ft. Wayne & Chicago R. R.—Progress of the Work.

Every thing seems to confirm the public expectation so far as the early completion of this splendid road is concerned. The track is already closed to the New Albany & Salem Road, one party continuing to lay track from thence eastward. The other party will commence laying track as soon as the 10th inst. in the neighborhood of Rock Island Junction and Ainsworth Station, the grading having progressed sufficiently far for that purpose. A most commendable energy is now concentrated upon this, the only remaining portion of heavy work not completed. A force of over two hundred men are busily employed grading the bank over the deep and apparently impassable swamp lying between the Junction and the Calumet river. The superior excellence of the management of this difficult task of engineering is evinced by the success of the Company in building a firm, solid embankment over the same swamp which the Michigan Southern and Central Roads, when first constructed, crossed by miles of pile bridging. The contractors, Messrs. Lewis Broad and George Dalton, Esqs., under the direction of the engineers, are doing all that competent practical men can do under the supervision of intelligent and skillful officers. It is indeed marvelous that so large a body of men can work so efficiently and steadily in such deep water. We presume good, prompt pay and kind treatment are the principal incentives to such difficult labor. The materials for the track are now being distributed along the line, and soon those indefatigable contractors, Messrs. Barnes & Fenlon, will arrange them in symmetrical lines. We understand that during the past week many difficulties which seemed to interpose insuperable obstacles to the erection of the bridge across the South Branch have been removed (several meetings of parties most interested having taken place) and that such negotiations are pending as will insure the commencement of

the bridge at an early date. The President of the road is expected in a few days, to terminate preliminaries in a manner favorable and satisfactory to all parties concerned. Success to the work. Everybody feels interested in its progress.

PRUSSIA IRON.

According to the *Cologne Gazette*, the iron mines in that country produced, in 1854, 2,198,839 tons of ore; in 1855 3,381,169 do.; in 1856 3,291,169; and in 1857 3,397,309 tons. 18000 workmen have been employed in the mines. Since the year 1848, the production of raw iron, pig iron, and raw steel, has increased from 2½ million to more than 8 million quintals. The manufacture of articles in cast iron has attained 2,560,000 quintals, whereas it was at the first mentioned period only 929,000 quintals. That of bar iron and rails has increased from 2,740,000 to about 5,500,000 quintals. The importation of raw iron in the Zollverein has doubled since 1854, when it was only 2,267,811 quintals. The proportion of increase is greater still in the case of forged iron in bars of half an inch square, and wrought iron in bars. They come principally from England and Belgium. The increase in the exportation is not so large; there is, however, an increase of one-half in the article raw iron, while upon other qualities there has been no notable change. It is only fair to conclude from this augmentation in that more extensively employed for agricultural, industrial, and railway purposes, and in general for all branches of industry where iron can be made use of.

MANUFACTURE OF STEEL BY THE UCHATIUS PROCESS.

Extract of the proceedings of the Institution of British Mechanical Engineers, at a meeting held at New Castle, Tuesday, Aug. 24th:

UCHATIUS STEEL.—The Secretary next read a paper by Mr. T. Spencer, Newburn Steel Works, on the "Manufacture of Steel by the Uchatius process." The paper described the process of manufacture, and said that by it very fine steel could be produced at little more than one-half the cost of the common method. Mr. Fairbairn said they were in a transition state in regard to the principle of manufacturing steel, and they might look forward to very great improvements, not only in the manufacture of steel, but also of iron. Mr. Bessemer and others in Sheffield were making steel plates of a very high order, and he learned from Mr. Spencer's paper that a bar of steel, an inch square, sustained nearly three times the weight sustained by iron of the same description. He had no doubt that when the attention of gentlemen connected with the iron manufacture of the country was directed to it, they would have plates that would be perfectly homogeneous, and be at least double the strength of iron plates. If metal of this sort could be obtained at a moderate cost, and used in boiler construction in plates of one-half the present thickness, they should attain very important advantages. Now, when steam was being used at a very high pressure, it was very important that they should have materials that could be depended upon. Mr. Prideaux, London, asked if the only object in reducing the iron to a granular form was to free it from sulphur. Mr. Haswell corroborated Mr. Fairbairn's remark that they were in a transition state. Great strides were being quietly made in the manufacture of steel. He had no doubt the steel

produced could be drawn out into remarkably good wire, and consequently they might look forward to a vastly increased strength of wire-rope with a less diameter. It would also be substituted for iron where it was desirable to have great strength. Mr. A. Laing said the object of granulating was not to get rid of the sulphur. Capt. Uchatius' object was to make steel cheap, and he even hoped we should have cast steel rails. Mr. Anderson said it was clear they were on the highway to a better kind of material at a lower price. After further discussion, a vote of thanks was given to Mr. Spencer.

NEW WHITE METAL.

A new alloy, which does not appear to tarnish more readily than ordinary white metal, and which is considerably cheaper, has just been discovered by Mr. W. Sharman, and it is thought probable that it will, to a great extent, supersede the various Britannia metals now in use. The alloy consists of tin, 16 parts; zinc, 3 to 4 parts; lead, 3 to 4 parts; and differs from all similar compounds on record from the much larger percentage of zinc it contains. In the process of manufacture the zinc is first melted at as low a heat as possible, the tin is next added, and finally, the lead. The whole is well stirred up with a green wood pole, to ensure perfect mixture, and to prevent oxidation, for which latter purpose a coating of borax, and the addition of a little resin will be found useful.—The whole operation must be conducted as quickly as possible, and excess of heat avoided. The proportions may be modified as required, more zinc giving less ductility, and more tin giving more flexibility, and a better color. For teapots, &c., the alloy 16 parts tin, 3 parts zinc, and 3 parts lead, is preferable. These alloys being easily fusible, care must be taken in the selection of the solder. The new alloy can be rolled and spun, and will, therefore, be easy of application to a large variety of purposes.—*London Mining Journal*, Aug. 14.

COMPLETING THE ERIE ENLARGEMENT.

—The Canal Board adjourned on Saturday afternoon, after a session of two days. Reports from the Engineers of the Western Division were submitted by Commissioner Ruggles, showing that a channel seven feet deep, and at least forty-five feet wide, and permitting the passage of boats fully loaded, can now be obtained by a further expenditure not exceeding \$140,000. The cost of finishing all the work on the two other divisions will not exceed \$100,000; so that the enlargement is in fact on the very eve of completion. Nothing will prevent its being brought wholly into use at the opening of navigation in the spring but the unfinished work on the Cayuga Marshes, which has been unaccountably delayed, and may postpone the use of the channel with the full depth until the Spring of 1860.

On considering these reports, the Canal Board permitted such change of plan in the work on the marshes, and consequently increase in price, as will enable the contractor, without delay, to employ extra force, working at extra hours, so as to bring this section into use by the 1st of August next.

A written stipulation was laid before the Board by Commissioner Ruggles, obtained from Mr. Blanchard, the proprietor of the new invention for saving fuel in steam boilers, permitting its use "by any boat navigating any of the canals of this State, or any river, lake or harbor connected therewith,"

on paying one-fourth of the value of the fuel saved—estimated at not less than *fifty dollars* for every voyage from Buffalo to New York and back.

The completion of the enlargement, with its full width of 70 feet, will require about \$200,000 in addition to the \$240,000 estimated for the channel 7 feet deep. A further sum of about \$500,000 will be needed for completing the enlargement of the Oswego and the Cayuga and Seneca Canals. These sums do not include the amounts now due for work actually done, and for land damages.—*Albany Journal*, Sept. 13.

THE MEXICAN RAILROAD.

The Vera Cruz correspondent of the *New Orleans Delta*, gives the following information concerning the progress of the railroad survey from that city to Mexico:

In Mexico I met with Col. Tolcott, steam engineer-in-chief of the survey being effected between this city and the capital for the purpose of locating a line of railroad for account of Manuel Escandon. I learned from his son that the line had been located as far as Orizaba, and that there they found that they could ascend the Cumbus between that city and Puebla, with not more than twenty miles of heavy grading, and with no grades over 200 feet to the mile. The big Barrance between Cordova and Orizaba will require a bridge of 1080 feet in length, and it will be about 350 feet above the running water beneath. This road is a work of great magnitude, but it is the only thing that can save the nation. Manuel Escandon has undertaken it, and he has the energy to carry it through, provided his countrymen will only give him a chance. I was told in Mexico, that Col. Tolcott's report would be made in September, and that then Escandon would proceed to Europe *via* the United States, in order to lay his plan before the capitalists of the world. If success attends him, I hope to see the work under way within the coming year. In eighteen months it could be finished as far as Orizaba, and in four years it could be carried to Mexico.

THROUGH TICKETS.—We understand that Col. J. J. Shoemaker, the chief engineer and general superintendent of the Central Pacific Railroad Company, has recently arrived in this country. His object is to consolidate the system of through tickets between Europe and the United States, and for this purpose he is making arrangements with the Grand Trunk Railway of Canada Company, by means of which travelers will be conveyed from this country to any part of the United States on the excellent plan first introduced by the Grand Trunk Railway of Canada. When the arrangements are complete the system will be in operation from Hamburg, Lubeck, &c. to Liverpool, thence to Canada, and so on to Chicago, St. Louis, Memphis, and to New Orleans. It is proposed to enable travelers to California to avail themselves of the through ticket system by the coaches now running from St. Louis and Memphis to Ft. Smith, and thence by the United States mail line of coaches to San Francisco. By this plan Hamburg will be placed within 35 days of San Francisco, and it can not be doubted that the shortening of the route and the reduction of the expense will stimulate emigration from Germany to a great extent. We understand that Col. Shoemaker intends to proceed to Hamburg with a view of making arrangements for emigration on a large scale.—*London Morning Post*.

The following paragraph from *Herapath's Journal*, shows that there has been a falling off of the earnings of railroads in Great Britain, as well as in this country:—

RAILWAY TRAFFIC.—The traffic returns of railways in the United Kingdom for the week ending July 31st. amounted to £514,580, and for the corresponding period of last year to £525,090, showing a decrease of £10,510. The gross receipts on the eight railways having their termini in the metropolis, amounted for the week ending as above to £220,862; and for the corresponding week of last year, to £225,376, showing a decrease of £4,514. The decrease on the London and North Western Railway amounted to £7,584; and on the South Eastern to £117; total, £7,701. But from this must be deducted £151, the increase on the Eastern Counties; £1,108 on the Great Northern; £644 on the Great Western; £138 on the London and Blackwall; £263 on the London, Brighton and South Coast; and £883 on the London and South Western; leaving the decrease as above, £4,518. The receipts on the other lines in the United Kingdom amounted to £293,718 and for the corresponding period of 1857, to £299,714, showing a decrease of £5,996 in the receipts of these lines; which, added to the decrease on the metropolitan lines, makes the total decrease £10,510 as compared with the corresponding week of 1857.

LOUISVILLE AND NASHVILLE R. R.—The following paragraph we copy from the *Nashville (Tenn.) True Whig* of the 17th inst.:

"This road is progressing rapidly forward to Gallatin, which place it will reach by the middle of next week—say the 22d inst. The two tunnels being cut on this road east of Gallatin, we learn, are getting on as rapidly as possible. The one next to Gallatin, or the south tunnel, is completed, and the other lacks one hundred and twelve feet of cutting to complete it. But these one hundred and twelve feet are hard limestone, and will require probably three or four months more labor. The grading on the portion of the road between Bowling Green, Ky., and the tunnels, we are told, will be done by the time the tunnels are. May we not then hope to have the cars running to Bowling Green by the next 4th of July? Our citizens are looking anxiously to the completion of this road to Gallatin, that they may enjoy the facilities it will open to travel and trade, and yet more anxiously to the completion of the whole road, that these facilities may be extended.

FLORIDA RAILROAD RESERVES.

We learn that the Acting Commissioner of the General Land Office (Jos. S. Wilson, Esq.) has issued instructions, under date of 19th ult., to the district officers at Tallahassee, Newnansville and St. Augustine, Florida, directing them to restore to pre-emption the U. S. reserved sections of land lying within the six mile limits of the different railroad routes in their districts. These instructions are issued in virtue of the provision of the act of Congress of 3d March, 1853, which extend the pre-emption features of the act of 4th September, 1841, to the class of lands above described, from the date of the "definite location" of the railroad routes for which Government lands have been granted, until the "final allotment" of the alternate or railroad sections to the State. The above lands having been absolutely withdrawn, however, for more than a year, have not, since the withdrawal, been subject to pre-emption until the issuing of the instructions above mentioned.

DELAWARE, LACKAWANNA AND WESTERN RAILROAD COMPANY.

"The annexed statement exhibits the condition of the Delaware, Lackawanna and Western Railroad, July 1, 1858.

Mortgage bonds of 1871.....	\$900,000 00	
Mortgage bonds of 1875.....	1,500,000 00	
Mortgage bonds of 1881.....	2,568,500 00	
Income bonds of 1802.....	462,910 00	
Income bonds of 1865.....	19,000 00	
Income bonds of 1867.....	759,436 31	
Bills payable, due 1858.....	552,092 03	
Bills payable, due 1859.....	319,836 18	
Afterwards.....	68,657 88	640,846 09
Accounts payable.....	511,133 99	951,080 08

Total Debt.....	\$7,161,926 39	
Cash on hand 30th of June, 1858.....	\$70,624 02	
Bills receivable due in 1858.....	\$136,558 69	
Afterwards.....	28,646 48	175,205 17
Accounts receivable.....	218,359 63	218,359 63
Coal on hand.....	211,930 46	676,149 28

Total available assets.....	\$6,485,677 11	
There were also on hand—		
Warren R. R. bonds.....	\$22,100 00	
Lackawanna & Bloomsburgh bonds.....	50,000 00	\$72,100 00
Bonds and mortgages, notes secured by real estate and other good notes, payable in 1 and 3 years.....	61,409 89	\$133,509 89

Warren R. R. stock.....	\$29 250 00	
Lackawanna and Bloomsburgh stock.....	142,450 00	431,700 00
REVENUE.—The receipts from sale of coal and transportation for the 6 months ending June 30, 1858, were.....	\$1,471,061 09	
Amount paid for coal and expenses during same time.....	1,144,040 91	

Net profits for 6 months..... \$327,020 18

"There was bought previously to June 30, 1858, \$27,450 of the Company's securities for the sinking fund.

"In the fulfillment of old contracts and the settlement of debts due the company, additional equipment has been acquired amounting to \$41,933 14.

"The construction accounts have been increased since 1st January last, about \$25,000, nearly the whole of which has accrued from the settlement of old contracts for right of way, and expenses therewith connected, and from the prosecution of the Van Nest Gap Tunnel on the Warren Railroad, in pursuance of contract. For the amount of money expended for the latter purpose, this company receive an equal amount of Warren stock."—*N. Y. Tribune, Sept. 20.*

The balance sheet of this company, as made up to May 1, 1858, was published in the *Register* of July 31.

In the foregoing statement, the revenue, it will be observed, derived "from sale of coal and transportation" for the half year ending June 30, was..... \$1,471,061 09

"Amount paid for coal and expenses during same time"..... 1,144,040 91

Net profits for 6 months..... \$327,020 18

The proportions of expense and profit, therefore, stand 77.76 of the former to 22.24 of the latter.

From these relative proportions it is obvious that the company are not at this time realizing much profit from their coal business, although it is their established policy, and we believe their invariable practice, to buy the coal from the operators at the pit's mouth, and carry and sell it at their own risk, along with the coal mined on their own lands, in order that they may have the absolute control of the coal business on their own line, and be able to act as a unit in the general tide water markets.

And as the words "aid transportation," after "coal," cover and include all revenue received from passengers and miscellaneous freights carried during the half year aforesaid, the "net profits" may have been derived mainly from those sources, leaving a very

small proportion of said net profits to be credited to profit on coal.

However, Lackawanna coal is reaching tide water in large quantity over the Delaware, Lackawanna and Western Railroad, and if the owners of said road are content to carry coal without profit, the consumers, certainly, have no ground for complaint. The object of the company is no doubt, to secure a position and customers for Lackawanna coal in the tide water markets, so that hereafter when the coal trade shall stiffen up, and higher prices in the market shall warrant a higher charge for transportation, the company may then swell their net earnings and realize a larger income from their coal traffic. And with their road built and in operation, it is not easy to discern that any wiser course was open to the company's choice.—*Mining Reg.*

IRON MANUFACTURING IN EAST TENN.

A correspondent of the *Mining Chronicle*, who is well posted on the iron resources of this region, furnishes the following items on the subject. He says:

Located in White's Creek, near the Tennessee river, in Roan county, Tennessee, in the midst of the best agricultural and stock growing section of the State, perhaps in the Union, they combine all the conveniences and advantages requisite to the cheap and profitable development of their great riches; in fact, nature has beneficially thrown together, almost in one conglomerate mass, every element at all necessary in the production of iron; hence, with the proper capital and enterprise, it is entirely safe to assume that pig iron and even railroad bars can be made at this point at as small a cost as at any given locality in the South or West.

The great desiderata in making cheap iron seem to be—

- 1st. An abundance of ores, cheap and of easy working qualities.
- 2d. Fuel and fluxes for smelting, abundant and contiguous to the furnaces.
- 3d. Cheap labor, provisions and stock.
- 4th. Facilities for easy transportation, and extensive distribution over the country.

On Whites's creek all these advantages have been most graciously provided, at least the proper elements to constitute them, are found in the closest proximity, and they only require to be touched by the magic wand of capital, and they will come forth to do man's bidding.

Beds of the finest bituminous coal, in strata, from two to ten feet in thickness are found within a few hundred feet of the ore deposits, and very near the most eligible sites for the building of furnaces and fixtures. Provisions can always be had at the lowest market rates, and every thing required to build, equip and put in operation as many furnaces as would be needed to furnish a rail mill with pig, can be procured on the very spot, at the least possible outlay of labor and capital. The subjoined tables show an estimate of the cost of making pig iron and railroad bars in the iron belt of Ohio, are from the able pen of Prof. Mather, geologist of that State, and will conclusively show to every practical iron man in the South, not only the feasibility of our successfully competing with foreign capitalists in the manufacture of railroad iron, but will also show that his figures are full high, when applied to the cost of making iron in East Tennessee.

Estimated Cost of Stone Coal, Pig Iron, 4000 Tons at one Furnace in Ohio.

Interest on \$40,000 investment in furnaces, lands, buildings, etc., at \$10.....	\$4,000
Taxes, incidentals, repairs, etc.....	4,000
10,000 tons of iron ore, at \$2, to make 4,000 tons iron.....	20,000
400,000 bushels coal at 5 cents.....	20,000
2,000 tons limestone, at \$1 per ton.....	2,000
Labor about the furnace, at \$2 per ton.....	6,000
Handling, weighing and transporting to rolling mill.....	4,000

Cost of 4,000 tons pig at rolling mill..... \$62,000 or \$15 50 per ton.

Estimate for converting Pig Iron into Rail- road Bars.

Interest on capital, \$-6,000, at ten per cent., 13,500 tons railroad bars per ton.....	\$50 59
Wear and tear of machinery and repairs per ton.....	1 50
Rolling furnace expenses per ton.....	6 00
Rolling into muck runs per ton.....	0 50
Catching, hooking, dragging out and sheeling per ton.....	0 37 50
Piling, strapping, heating, rolling, catching, drawing and straightening per ton.....	3 00
Sawing, trimming and straightening per ton.....	0 60
Coal, 25 to 60 bushels, say 60 bushels, at five cents.....	3 00
Engineering, oil and miscellaneous per ton.....	1 00
Incidentals, interest on floating capital; weighing, drayage, discounts and extras of the boiling furnace.....	5 43 50

Cost of converting pig into railroad bars, about..... \$22 00

The cost, then, of railroad bars at the depot or landing, would be—

Pig at the rail mill, per ton.....	\$15 50
One fifth loss in manufacture.....	3 10
Cost of making pig into railroad bars.....	22 00

Total cost of railroad bars per ton..... \$40 60

"This cost of \$40 60 is upon the supposition, that the furnaces are separate from each other, and from the rail mill, but that four blast furnaces and one rail mill belong to one company." Thus according to Prof. Mathers, with four pig furnaces at a cost of \$40,000 each, and one rail mill costing \$80,000 all belonging to the same company, after allowing interest, etc., at the rate of ten per cent. per annum on the investment, as also an amount which is deemed amply sufficient to cover contingencies, it is found that railroad bars can be made in Ohio for \$40 60 per ton, or less than the cost of foreign railroad iron.

These figures may do when applied to the latitude of Ohio, but we think it satisfactorily demonstrable, that they are higher than necessary in estimating the cost of producing pig and railroad iron in East Tennessee, and particularly at the White's Creek mines, with all their advantages, of timber, coal, ore, limestone and water, both as it regards its application as a motive power to machinery, and for the purpose of transporting the products of the furnace to market; lying as they do, immediately contiguous to each other, and in quantities sufficient to stock as many furnaces as would be required to supply one rail mill with pig, during the life time of two or three generations.

Prof. Mather's figures are also based upon the supposition that each of the four furnaces have capacity to make 4000 tons of pig in two hundred days, assuming that, as a basis applicable to our present purpose, we will go upon the presumption that the outlay in lands, etc., and the building of each furnace will not exceed, say \$30,000, and the following amount will cover the entire cost of stock, labor, etc., for two hundred days, as well as the cost of the gross product of pig in that time:

Interest on the investment, at ten per cent.....	\$3,000
Taxes, contingencies, etc., at.....	3,000
10,000 tons iron ore, at \$1 per ton.....	10,000
400,000 bushels coal, at 3 cents per bushel.....	12,000
2,000 tons limestone, at 50 cents per ton.....	1,000
Labor about the furnace.....	6,000

Cost of 4,000 tons of pig..... \$37,000 or \$9 25 per ton.

👉 The receipts of the Milwaukee and Mississippi Road, for the first week of September were \$24,000, against \$12,000 in the first week of August.

THE POPULATION OF THE GLOBE.

A distinguished Professor of the University of Berlin has lately produced a paper in relation to the population of the world, which is believed to be more reliable than anything which has yet appeared on this subject. After some detailed estimates in regard to the five great divisions of the world, he arrives at the conclusion that the present population is about twelve hundred and eighty-three millions, as follows:

Population of Europe, 272,000,000; of Asia, 720,000,000; of America, 200,000,000; of Africa, 89,000,000; of Australia, 2,000,000. Total population of the globe, 1,283,000,000.

The average number of deaths per annum, in certain places where records are kept, is about one to every forty inhabitants. At the present time the number of deaths in a year would be about 32,000,000, which is more than the entire present population of the United States. At this rate the average number of deaths per day is about 87,761, the average per hour about 3,653; the average per minute 61. Thus, at least, every second a human life is ended. As the births considerably exceed the deaths, there are probably 70 or 80 human beings born per minute.

ARTIFICIAL PRODUCTION OF COAL.—M. Baroulier stated to the Academy of Sciences, Paris, that he had invented an apparatus by means of which he is able to expose vegetable matter, strongly compressed and enveloped in damp clay, to a long sustained temperature of from 390 to 572°. This apparatus, without being absolutely close, prevents the escape of gas or vapors, so that the decomposition of the organic substances goes on in a medium saturated with humidity, and under a pressure which prevents the complete separation of the elements of which they are composed. On placing wood sawdust, of different sorts, under these conditions, the author obtained products which, in appearance and properties resembled sometimes shining coal, and at others dull coal. These differences may be referred to the conditions of the experiments, or to the nature of the wood employed; and perhaps it is thus that we may explain the mode of formation of the laminated coals, or those composed of a succession of layers alternately shining and dull. The stems and leaves of plants, embedded between layers of clay, leave, under the above circumstances, impressions altogether similar to those of the coal-field.

RAILROAD TO TAMPA, FLORIDA.—The Jacksonville (Fa.) News, of the 13th inst, says:

We learn that Mr. Yulee has lately closed a contract for the grading and cross-ties of forty miles of road from Bellamy station, on the Florida Railroad, in the direction of Tampa. The work is to be commenced by the 15th of November next. We understand that a survey of the various routes which have been suggested will be made in season to permit a final location to be determined before the date fixed for the beginning of the work.

The installment of \$20 per share has been paid on about 153,000 shares of the Illinois Central stock. The entire issue is 175,000 shares. This is considered as very favorable. A more favorable feeling has set in in England in regard to this enterprise.

MISSISSIPPI & MISSOURI RIVER RAILROAD.—Mr. Dodge, one of the engineers on the Mississippi and Missouri Railroad, with a number of assistants commenced the work of levelling and setting grade stakes on the road on Monday, Aug. 29.

It will take about a month to get the forty miles ready for grading, at which time, the contractor with a gang of hands will be upon the line of the road.

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4,000 Tons rails, 58 to 61 lbs. per yard. 200 tons rails 49 lbs. per yard. 1,000 tons rails 55 lbs. per yard. Also: several Locomotives of best manufacture, of any required weight and adapted to any gauge for sale by
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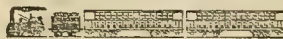
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Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.
Feb. 167* JOSEPH DAVENPORT.

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SPECIFICATIONS, ESTIMATES, AND PLANS,
In general or detail of all kinds of
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July 14, 1857. Jy23-1m

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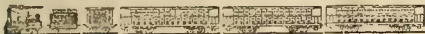
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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
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PATENT PORTABLE CIRCULAR S&W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw handles, Shingle Machines, &c.

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ON AND AFTER MONDAY MAY 10TH 1858. Trains leave Cincinnati Daily, Sunday excepted.

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10 A. M. MAIL.—Stopping at all stations.

5 P. M. ACCOMMODATION.—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS.—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

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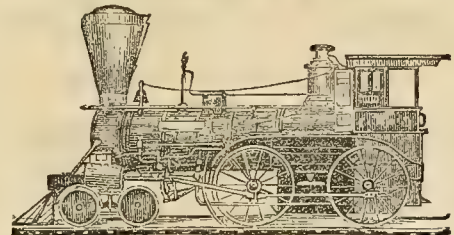
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

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1858 1858.

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Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

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Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; a Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

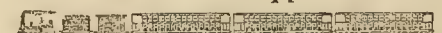
Leave Dayton at 8:05 A. M., 2:30 and 5:50 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:40 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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Two Passenger Trains daily each way, Sundays excepted, connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every even day.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
Robert Harris, Sup't.
Racine, May 15, 1857. my21

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AND TENDERS, AND

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WALTER McQUEEN Sup't. Aug 16

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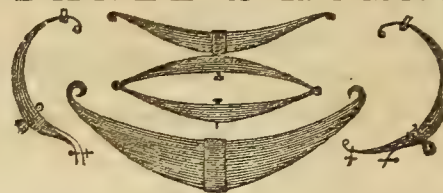
For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,
Respectfully Yours,
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Mar. 25, if

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It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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AND

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WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, OCT. 7, 1880.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING

By WRIGHTSON & CO.

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WRIGHTSON & CO.,

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MOBILE AND OHIO RAILROAD.

A telegraph dispatch in the N. O. *Picayune* says:

By the steamship Asia we have intelligence that the negotiations of the Mobile and Ohio Railroad Company in England have been entirely successful.

This intelligence, says the *Register*, will be joyfully received by our community, whose hopes have been somewhat deferred by the untoward circumstances of the money market for some time past, and the friends of the great thoroughfares will pluck up spirit as they now see every obstacle vanish before a speedy completion of the roads. The works are proceeding with great alacrity on the other end of the road, and when the iron shall arrive, it will not be long before both ends meet of this magnificent enterprise.

THE ENGINEERS OF AMERICA.

In our last number, we said that nothing was more unjust, than the charge made in some recent publications, that much of the difficulties in American Railroads was due to faults of Engineers! We stated the simple fact, that at this very moment the engineers and the practical mechanics of the United States stood equal to any in the world. This fact will not be denied by those who know what engineering is, or in what estimation they are held by other nations. The subject is an interesting one, and we shall furnish some facts in illustration of our position.

But, before we do this, let us admit, at once, what all the world must know to be true—that in making *twenty-five thousand miles of Railroad*, in a very few years, there must necessarily have been employed a great number of persons in the engineering department of our roads, who were without experience, and not educated particularly for that purpose; that in consequence of this fact, there must have been some errors, and probably some incompetency in the construction of roads, which might not have occurred in old countries like France or Germany, where but few roads are made, and those command the best talent of the country.

These facts we admit; but affirm, that as a whole, we have had as good practical engineers in our service as the world holds, and that the defects and want of productiveness, in American roads, so far as this is true, (and it is not true to the extent supposed) is not a consequence of bad engineering. To prove this, by illustration, we shall state first the kind of persons and character, who have been employed on the principal Railroads of America, as far as we know them, (and it is not necessary to know them all for this purpose,) and then state the roads they have made, so that we may exhibit very clearly the character of our engineers by their works.

1. We state that a very large number of the engineers employed on the American railroads have been graduates of the United States Military Academy, or teachers connected with it. No one, but a confirmed ignoramus will deny, that engineering is thoroughly taught at West Point, or that its graduates have not proved practically as good engineers as can be found in any country. Military engineering and civil engineering are not the same in name, but they are in principle. Every rule or principle involved in one is involved in the other. The only difference is that, civil engineers scarcely ever carries their studies so far as military engineers, and are usually much less scientific men. The early engineers on our railroads—and the most successful ones too—were graduates of the Military Academy. The roads constructed by them are sufficient proof that they understood their business; so

far as the little experience then had in railroading would admit. For it must be recollected that in the construction of our early railroads, it was an untried business.

The public generally knows very little of what the country really owes to the men brought up at West Point; and we shall here state some of the names and facts connected with that chapter of our history.

First, In the last twenty-five years there have been employed in the Civil Engineering service—one hundred and twenty graduates or teachers of the U. S. Military Academy; nearly all of them on, or connected with railroads. For the mere purpose of illustration, we will here mention some of the most distinguished engineers among them, as related to Railroads.

COL. S. H. LONG, now chief of the River Improvement service of the United States, and in the Topographical corps. This gentleman we have already mentioned in connection with the early history of railroads. He and Mr. McNiell were the very first connected with the construction of the Baltimore and Ohio Railroad. This gentleman was not a graduate, but was an early instructor at West Point.

WILLIAM GIBBS MCNIELL. He, with Col. Long, were members of the Board of Engineers of the Baltimore and Ohio Railroad from 1827 to 1829. He was the Chief Engineer of the Baltimore and Susquehanna Railroad, 1829 to 1836; of the Boston and Providence Railroad, 1832-'35; of Western R. R., Mass., 1836 and 1840, and was engaged on several other roads.

ANDREW TALCOTT was adjunct engineer on the New York & Erie R. R. in 1836-'37; Chief Engineer of the Richmond & Danville R. R., Va., 1848-'52; and engineer on the Ohio & Mississippi R. R. in 1854-'57.

GEORGE W. WHISTLER, Civil Engineer in the United States from 1833 to 1842, and in the service of Russia from 1842 to 1849. Mr. Whistler was engaged on several of the Eastern Roads, and finally died in Russia.

JOSHUA BOMEY, Engineer on the Andover and Haverhill R. R., Mass.

WILLIAM COOK, Engineer on the Camden & Amboy Railroad, and the Philadelphia & Trenton R. R.

WALTER GYNN, Chief Engineer of the Portsmouth & Roanoke R. R.; of the Wilmington & R. R. R., and consulting Engineer on the Wilmington & Manchester Railroad.

WILLIAM C. YOUNG, Chief Engineer and Superintendent of the Utica & Schenectady R. R., and Chief Engineer of the Hud. River Railroad.

ISAAC R. TRIMBLE, Chief Engineer of the Baltimore & Susquehanna R. R. from 1835 to 1838, and Engineer of the Philadelphia and Wilmington R. R. from 1842 to 1849.

GEORGE S. GREENE, Engineer on the Portland & Kennebec R. R., 1847.

THOMPSON S. BROWN, Chief Engineer of the Western Division of the New York and Erie R. R., and on the entire road, 1842-'49; and consulting engineer of the St. Petersburg & Moscow R. R. since 1849.

EDMOND FRENCH, Resident Engineer on the Hudson River Road.

JOHN M. BERRIEN, Chief Engineer of the Central Railroad, Michigan.

JOHN CHILDE, Chief Engineer of the Troy and Albany R. R., and Connecticut River Road; Chief Engineer of the Cleveland and Columbus R. R., 1848; and now of the Mobile and Ohio R. R.

JAMES BARNES, Chief Engineer of the Seaboard & Roanoke R. R.

WILLIAM R. MCKEE, Chief Engineer of the Frankfort & Lexington Railroad, 1844-1846.

ANTS SNYDER, Chief Engineer of the Columbia and Philadelphia R. R.

THOMAS A. MORRIS, Chief Engineer of the Madison and Indianapolis R. R.

WILLIAM S. BROWN, Chief Engineer of the Columbia and Greenville Road,

HORATIO A. WILSON, Chief Engineer of the Havana and Gumes Railroad, Island of Cuba.

We shall enumerate no more at present, as it is not our intention to confine the list to the pupils of the Military Academy; but only to illustrate our position, that the engineers employed on our railroads were superior men; well educated, and with a few exceptions, their works would prove their knowledge of the subject and their integrity in business. In another article we shall continue the subject, with the names of some of the most distinguished engineers not educated at West Point; and with proof from the roads constructed, that the engineers are in no way accountable for the cost of the roads.

RAILROAD TRAFFIC.

The comparative extent of the Fall season is well illustrated in the traffic of those railroads which have made regular returns for the month of August. Of these, twelve leading ones are as follows:

RAILROAD EARNINGS FOR AUGUST.

	1858.	1857.	Decrease.
Penn. Central.....	\$429,999 19	462,911 48	31,682 29
Baltimore & Ohio....	371,288 60	448,358 18	77,069 53
Phil. & Reading.....	247,008 02	208,546 34	51,478 32
Michigan Central....	176,160 82	221,333 98	45,293 16
Illinois Central.....	198,184 66	221,893 82	25,439 16
Chicago & Rock Is'd	81,086 42	157,849 02	72,322 64
Gal. & Chicago.....	122,750 76	172,465 05	50,114 29
C. B. & Quincy.....	104,687 05	145,940 41	41,353 36
New York & Erie....	375,953 04	530,626 42	155,373 38
New York Central..	543,109 04	662,183 87	119,976 77
N. Y. & New Haven	72,720 72	89,247 49	16,526 97
Harlem.....	94,496 09	95,512 58	4,016 49
Total for August...	\$2,766,673 97	3,566,783 68	740,111 75

It will be seen, from this table, that Railroad traffic for the month of August declined, as compared with last year, about twenty per

cent! These roads comprise about 3,200 miles, or an eighth part of the roads in the United States.

Their receipts however are about one-third. Should the decline on other roads have been the same, the loss of receipts in the single month of August must have reached about \$2,000,000! We know, however, from our own observation, that the receipts of the Ohio Railroads have not been, in any such proportion. Indeed, we believe the Ohio roads did quite as well in August, 1858, as in August, 1857. Not one of these, it will be seen, is in the above list. The Little Miami, the Dayton, the Wilmington and Zanesville, and the Marietta roads are all doing better than they did last year. This is true, we believe, of nearly all the Ohio roads. The great reason is, that Ohio being a populous and wealthy State, exporting and importing a vast amount of products, is more self-dependent, and its roads depend largely on their local business. If immigration falls off, and foreign importations, the great bulk of the loss falls on the four great lines to the Atlantic cities, and not on Ohio or Indiana roads; for, these last States receive now but a small proportion of foreign immigrants; of foreign goods, only a portion of what passes over these lines comes to them. Of the traffic of the Ohio roads, but a small part comes from without the State, as compared with that which comes from within. It is otherwise with the business of such roads as the N. Y. Central, the Baltimore and Ohio, etc. All those lines depend for their traffic very largely upon distant regions, and when this great current is checked, they suffer much. In the above list, it will be seen, that the four central lines lost \$382,000 in the month of August! It is true, that two of these lines (N. Y.), lost a good deal by an intestine war, by which their rates were reduced. But, they would have lost in any event. The Western lines, so far as we see, are gaining in the month of September. But they can not gain much for a year longer, for a reason which has not been taken into view fully, viz: the great reduction of the crops. We are sorry to say this; but the fact is so. The crops of all kinds in the North-west can hardly reach within 40 per cent. of what may be called an average crop, and consequently, the exports must fall off.

REVENUE OF THE UNITED STATES.

The Customs' revenues of the United States, for seven years past, have been as follows:

	Revenue.
1852.....	\$49,165,933
1853.....	58,692,722
1854.....	65,133,837
1855.....	53,912,547
1856.....	64,231,637
1857.....	64,171,034
1858.....	41,789,621

The revenue of the country from foreign imports reached its climax in 1854, and with-

out a modification of the tariff, can not increase, but must diminish. For this, there are several sufficient reasons. A large part of the revenue has been derived from Sugar, (reaching, in 1857, \$13,000,000,) from Iron, and from Cottons.

The Louisiana crop of Sugar will, this year, be a good one, and will greatly diminish the foreign importation. The construction of railroads has largely diminished, and American Furnaces are increasing, the result of which must be a diminution of revenue from that source.

The American Cotton Manufacture is steadily increasing, and we are already exporting largely of the coarse kinds.

It is quite evident, therefore, that the government can no longer hope to get as large an income as it has had. The failure is not merely for one year. It will be a permanent failure; and the question must soon arise among the statesmen of this country, what is to be done for a revenue?

It seems to us, there are only three modes of avoiding the difficulty. We must either raise the Tariff; enact Direct Taxation; or, what is, perhaps, better than either—*reduce our expenses.*

[Correspondence of the Record.]

DAVENPORT, IOWA, Oct. 4, 1858.

MESSRS. EDITORS:

The change that has been wrought in this western country in the past five years, is truly marvellous. Places at that time only small villages, have grown into good sized cities with gaslighted and well paved streets, long lines of substantial stores and dwellings—capacious and elegant hotels, with "all the modern conveniences," costly and beautiful churches, public halls, theaters and all the *etceteras* of full grown cities, not even excepting swindling politicians, contractors, councilmen and public officers!

The greater part of all this change is unquestionably due to the great network of railroads stretching out from the Atlantic and finding a temporary terminus on the banks of the Mississippi; but which will soon be transferred to the Missouri. Already eight of these lines have crossed the Mississippi and are stretching off westward at a rate that will bring some of them to the Missouri before the ice is out of that stream next spring.

The first of these roads to accomplish this feat, will be the Hannibal and St. Joseph, which is already completed about 80 miles on the east and about 30 miles on the west end, and the intervening gap of some 70 or 80 miles is being filled up at the rate of half a mile per day.

As this will be the first road open to the Missouri, it must become one of the leading thoroughfares of the country. The links connecting it with the Great Western—or more properly the Toledo, Wabash and Wes-

And inasmuch as the demurrer, being taken to the whole bill, must be overruled, if the bill for any purpose is sustainable, it is not necessary to decide whether the complainants are entitled to the aid of a court of equity to put them in possession, either in the course of or independent of, a process of foreclosure. This question also may best be decided at the hearing. If the complainants merely sought possession of tangible property of the company, not for the purpose of foreclosing the mortgage, but to enable them to take its profits, there might be no sufficient reason for the interposition of a court of equity. On the other hand, if they also need to be quieted and protected in the enjoyment of incorporeal rights, the nature of the rights, and their liability to numerous interruptions and infringements might render the powers of a court of equity indispensable to their effectual protection. See *Croton Turnpike Co. v. Ryder*, 1 John. Ch. R. 611; *Newburgh Turnpike Co. v. Miller*, 5 John. Ch. R. 101; *Boston Water Power Co. v. Boston and Worcester R. R. Co.*, 16 Pick. 335. When the whole case is before the court, it can be seen what the rights of the parties are, and how far and for what purposes the complainants need the aid of the court.

The remaining question is, whether it was necessary for the trustees to make the bondholders parties. Generally when a mortgage is made to a trustee for the benefit of *cestui que trust*, I apprehend that the question whether the *cestui que trust* ought to be made a party, depends on the purpose of the trust. If the trustee is the proper party to receive and continue to hold the money for the benefit of the *cestui que trust*, so that the object of the suit is merely to reduce the trust fund to possession, that the trustee may hold it in trust, the *cestui que trust* is not a necessary party. For I take the general rule to be, that to a suit by a trustee to obtain possession of the trust fund, the *cestui que trust* need not be made a party. See *Calvert on Parties*, 212-215, and cases there cited. *Allen v. Knight*, 5 Hare, 272.

But where a trustee is interposed between a lender and a borrower merely for the purpose of enabling the lender to obtain payment through the exercise by the trustee of powers conferred on him by the mortgage, and the lender is the proper party to receive the money, he should be made a party to a bill for foreclosure. It is, in truth, between him and the mortgagor that the account is to be taken, and he ought to be before the court, for the purpose of taking the account, as well as to receive the money, if paid. See *Story's Eq. Pl.*, sec. 201.

But this requirement of the presence of the *cestui que trust* must give way to the absolute impossibility, or even to the excessive inconvenience of complying with it. And the case at bar undoubtedly presents an instance of excessive inconvenience, if not of absolute impossibility.

The bill shows that the number of different bonds secured by this mortgage was seven hundred and five, amounting to the sum of \$500,000. They were not issued until after the execution of the mortgage; of course their original holders are not parties to the deed. It is a notorious fact, and recognized in various ways by the legislation of most States where railroad corporations have issued such bonds, and manifestly contemplated by the deed in question, that these bonds were to be sold in the market and pass from hand to hand. Consequently it must have been impossible for the trustees to know who were the holders when the bill was filed; and if then known, there would be no probability that they would continue in the same hands during any considerable time.

To require the trustees to make the holders parties, would amount to a prohibition to sue; and it is now too well settled to require a reference to authorities to show that courts of equity do not allow a rule respecting parties, adopted for the purposes of convenience and safety, to operate so as to defeat entirely the purposes of justice.

Nor is this a case in which it could answer any beneficial purpose to make some of the bondholders parties in behalf of themselves and all others. The trustees are competent, and it is their duty, to represent all. (*Powell v. Wright*, 7 Beav. 444.) The deed so treats them. In the case of a sale, or possession taken of the road for purposes of managing it and receiving the income, the deed looks to the trustees to ascertain who are holders of bonds, and to pay to each his aliquot part. And it is in the power of the court, by directing the proper inquiries before a master, to have the holders of the bonds before the court at the moment when the account is to be taken, and thus afford all needful security, as well to them as to the mortgagors and the trustees. (See *Story's Eq. Pl.*, sec. 507, a; *Williams v. Gibbs*, 17 How. 339; *Gooding v. Oliver*, 174.)

It was stated at the bar that the Supreme Court of Massachusetts came to this same conclusion in reference to parties, in *Shaw v. The Norfolk C. R. R.*, above referred to, but that no report of the decision, on that point, has been made, (5 Gray, 170.) My opinion is that that the objection for the want of parties is not tenable.

The demurrer is overruled, and the defendants ordered to answer the bill. —*Monthly Law Reporter*.

A SUCCESSFUL MINE.

The Minnesota Mining Company has declared a second semi-annual dividend of \$9 per share, or 18 per cent., payable at the office of the Company, 187 Greenwich street.

The sales of last year's product having been now closed, the net earnings of the Company are ascertained to be about \$306,000, of which \$120,000 were divided among the stockhold-

ers in April last, and 180,000 are now announced for the dividend on the 1st of November.

This last dividend makes the total amount divided by this Company in their first six years, from 1852 to 1857, \$980,000, being nearly \$327 on each of the original 3000 shares. The amount originally paid in by the stockholders was \$22 per share, so that each holder has received about \$55 a year since 1852 for every \$22 originally invested, or 250 per cent. per annum; while, if disposed to sell out, he could now readily obtain \$400 or more for the same.

This will be generally admitted to be doing very well. Some other Companies may have done a little better, but there are none of them in this country, and they are very few indeed and far between in any part of the world.

ON THE PRESERVATION OF TIMBER BY CREOSOTE.

At a general meeting of the Society of Mechanical Engineers, held at Birmingham, Eng., a paper was read upon the subject of preserving timber by creosote, which we copy below, together with the discussion which ensued. Railway sleepers preserved after Mr. Bethell's method, have been in use in Great Britain since 1841, without showing the least decay. In Messrs. Colburn & Holley's new work upon "European Railways," this method of preserving wood is treated upon with others, and a description given of the apparatus used for forcing the oil into the pores of the wood. The preservation of sleepers or cross-ties by chemical means, so that their "life" may be prolonged from five or eight years, to fifteen or twenty-five years, is a matter of some consequence. It is the merest folly to go on year after year laying new sleepers of unprepared wood that will last not more than five or seven years, when by a little extra expense, they would last double and even quadruple that time. It is the duty of our railway managers to look into this matter and to act upon it. We have now a splendid system of railroads in operation in the United States—over 26,000 miles—and now that the lines are opened, the effort should be to preserve and perpetuate them from the earnings, so that they will pay a fair dividend upon the present cost. If we can double the life of the sleepers, the rails and the rolling stock, reduce the fuel expenses and introduce general economy where waste and extravagance has heretofore been the rule, we shall do this. If the present managers can not do this, they will have to make way for those who can.

In the present day, when the requirements for timber in the various mining, engineering and other works are so great, it becomes necessary to consider carefully the best means of rendering it as durable as possible, and that at the least expense; and the writer can not think that sufficient attention has been paid to the subject by the parties most interested, from the fact that but few of the larger consumers of that article have adopted any plans for its preservation; and this fact must be the apology of bringing before the Institution a paper upon a process which has been partially in use for several years.

In looking through the colliery districts, it is found that thousands of loads of timber are taken green from the forests and used every year; and the greater portion is used in the pits where, owing to damp atmosphere and increased temperature, it is rotted in a

few months; whereas with a small expense, it might be made to last for years.

It may be observed, also, that railway engineers are seeking for a more durable bearing for the rails in iron sleepers, and overlooking the means of making wood, which is allowed to be the most agreeable for traveling upon, the most durable as well as the most economical material for the permanent way.

Wood may be briefly stated to be composed of a fibrous tissue, which, upon examination with the microscope, is found to consist of longitudinal tubes arranged in concentric rings around the center pit; the tubes varying in diameter from 1-2000th to 1-200th part of an inch; the use of these tubes in a growing tree is to convey the sap from the root to the branches; and after the tree is cut up for use, they contain the chief constituent of the sap, vegetable albumen—a substance very much resembling in its composition, animal albumen, or the white of an egg. Different woods vary in the proportion which they contain of this substance, but in the softer woods it averages one per cent.

The dry rot in timber is caused by the putrefaction of the vegetable albumen, to which change there is a great tendency; and when once this has taken place, it soon infects the woody fibre, inducing decomposition, and causing its entire destruction.

Many plans have been proposed to arrest this evil, each with more or less success; the chief aim of the authors being to coagulate the albumen by means of metallic salts, and so prevent putrefaction. Among others may be mentioned the following, as being the most successful: Kyan's process, by the use of chloride of mercury; Burnett's, by chloride of zinc; and Payne's by sulphate of iron and muriate of lime, forming an insoluble precipitate in the pores of the wood. To each of these plans there are serious objections in practice. In the first place, when metallic salts are injected into timber in sufficient quantities to crystallize, the crystals force open the pores, causing a disruption of the fibre, and when the timber afterwards becomes wet, they dissolve, leaving large spaces for the lodgment of water, and rendering the timber much weaker. Secondly, the metallic salts being incapable of sealing the pores of the wood, the fibre is still exposed to the action called *eremacausis*, a process of oxidation, after the albumen has been precipitated. The processes are also objectionable for wood that requires iron inserted in or attached to it, as the acids act upon the iron in a manner well known, and ultimately destroy it.

The plan that is the subject of the present paper, is the one invented by Mr. Bethell, for the use of a material obtained by the distillation of coal tar. This material consists of a series of bituminous oils combined with a portion of creosote; this latter substance being acknowledged to possess the most powerful antiseptic properties. The action of this material may be thus described:—When injected into a piece of wood, the creosote coagulates the albumen, thus preventing the putrefactive decomposition, and the bituminous oils enter the whole of the capillary tubes, encasing the woody fibers as with a shield, and closing up the whole of the pores, so as entirely to exclude both water and air; and these bituminous oils being insoluble in water, and unaffected by air, renders the process applicable to any situation. So little is this oil affected by atmospheric change that the writer has seen wrought iron pipes that had merely been painted over with it

and laid in a light ground one foot beneath the surface, taken up after twenty years, and they appeared and smelt as fresh as when first laid down.

By using these bituminous oils, the most inferior timber, and that which would otherwise soonest decay, from being more porous and containing more sap, or being cut too young, or at the wrong season, is rendered the most durable. This will be readily understood, when it is considered that this porous wood will absorb a larger portion of the preserving material than the more close and hard woods; in fact, the soft woods are rendered hard by this process. By this means, therefore, engineers will be enabled to use a cheaper timber with greater advantage than they could use a more expensive timber uncreosoted;—thus, taking the cost of a sleeper of American yellow pine at 4s., and one of Scotch fir at 3s. and then adding 1s. to the latter for creosoting, the two would be the same cost; but the former one would last under the most favorable circumstances, not more than ten to twelve years, and the other would be good under any circumstances, in all probability, in a hundred years.

This system of preserving timber has been in use on several railroads, and other works for several years past. A portion of the London and North-western railway about seventeen miles in length, has been laid with the creosoted sleepers from nine to eleven years, during which period the engineer reports that no instance has occurred in which any decay has been detected in them, and they continue quite as sound as when first put down. On the Stockton and Darlington Railway, creosoted sleepers have also been laid for ten years, and are found to continue without any appearance of change or decay, also on the Lancashire and Yorkshire Railway, creosoted timber has been used for five years as paving blocks, posts, etc.; the upper part becomes very hard, and the part under ground appears as fresh as when taken out of the creosote tank, though the timber was of inferior, sappy quality. In a trial commenced twelve years since, by Mr. Price, of Gloucester, of the comparative durability of timber in the covers of a melon pit, where it was exposed constantly to the combined action of the decomposing matter, and the atmosphere—the unprepared timber became decayed in one year, and required replacing in a few years; a portion of the timber that had been kyanized lasted well for about seven years, but then gradually, though very slowly, became quite decayed; but the timber that had been creosoted still continues as sound as when first put down twelve years since.

From these facts, it appears not unreasonable to infer, that if timber can be made to continue unchanged and to show no symptoms of decay for ten or twelve years, under circumstances that reduce unprepared timber to dust in two years, and in the absence of any proof to the contrary, we may expect to find that it will last an unlimited period, and that one hundred years will be a moderate life to assign it.

And not only does this creosoting process render wood free from decay, but it also preserves it from the attacks of the teredo worm, when used for shipbuilding, harbors, docks, and other works contiguous to the sea.

This has been satisfactorily proved at Lowestoft harbor, where the plan has had a very extensive trial for four years; and the superintendent reports that there is no instance whatever of an uncreosoted pile being sound,

they are all attacked by the limnoria and the teredo to a very great extent, and the piles in some instances are eaten through; but there is no instance whatever, of a creosoted pile being touched, either by the teredo or the limnoria, and all the creosoted piles are quite sound, though covered with vegetation, which generally attracts the teredo. This extraordinary fact is to be accounted for by the creosote remaining intact in the timber, either wet or dry; and, being destructive to all animal life, is proof against the attack of these parasites;—whereas, with the other processes the metallic salts are washed out, or that portion which unites with and coagulates the albumen is rendered quite innocuous by the process. It will be seen by the specimens exhibited, that the ravages of the worm reduced the unprepared timber to a complete honey-combed state in two years, but the creosoted timber remains untouched after a period of four years.

There are two processes in use by Mr. Bethell, for impregnating timber with creosote: one is by placing the wood in a strong iron cylinder, and exhausting the air from it by an air pump, until a vacuum is created equal to about twelve pounds on the square inch; the creosote is then allowed to flow into the cylinder, and afterwards a pressure is put upon the creosote, by a force pump, equal to about 150 pounds to the square inch; the timber then taken out is fit for use.

The second process is by placing the timber in a drying house, and passing the products of combustion through it; thereby not only drying the timber rapidly, but impregnating it, to a certain extent, with the volatile oily matter and creosote contained in the products given off from the fuel used to heat the house. When the timber is taken out of this house, it is at once immersed in hot creosote in an open tank, thus avoiding the use of a steam engine, or pumps.

Mr. Clift exhibited specimens of creosoted sleepers, which had been in use for ten years on the London and North-western Railway; near Manchester, and were still perfectly sound and unchanged; also, specimens of creosoted Piles from Lowestoft harbor, which had been in the sea for four years, and continued quite fresh and sound, and without being touched by the worm; with specimens of similar piles uncreosoted, from the same situation, which were completely eaten away and honey-combed by the worm in the same period.

Mr. Bethell observed that, during the working of this process, he had found, that green or very wet timber could not be properly creosoted, and that no pressure would get the creosote into such timber from the presence of moisture in the pores, and, therefore, it became necessary to adopt a system of drying the timber first; but, after fourteen days drying by the old process, he found that the wood only lost 3 lbs. in weight in every cubic foot. He then introduced his present patent drying house, and in twelve or fourteen hours Scotch fir sleepers lost 8 lbs. per cubic foot, and these then absorbed an equal weight of creosote. An average of $11\frac{1}{2}$ lbs. of creosote per cubic foot was now put into all the Memel timber of Leith harbor works; it was forced in with a pressure of 180 lbs. per inch. One piece of creosoted timber had been observed at Lowestoft, which had been half cut through for a mortice, but not filled up again, and a teredo had penetrated a little way into it at that part, and then attempted to turn to the

1-ft. and had ultimately quitted the timber without proceeding any farther. Youngwood is the most porous round the exterior, and consequently absorbed most creosote, which formed a shield to keep off the worm. The creosoted sleepers were better after eight or ten years than when new, because the creosote got consolidated in them and rendered them harder. He had taken the idea originally from the Egyptian mummy; it was exactly the same process; any animal put into a creosote tank assumed the appearance and became in like condition to mummy. Timber creosoted was now chiefly used in railroads, but he believed that if it was introduced into coal pits, it would be found that no timber so used in those places would rot.

The chairman remarked that if the owners of pits found it so much to their advantage, he was sure the plan would come into use.

Mr. Clift said he had taken up the subject in the present paper with that view; his object was to draw attention to pit timber, and he was satisfied that if the timber used in coal pits was creosoted, it might, when done with in one situation, be again taken out to use in another place; whereas, now, because the dry rot seized the timber so quickly, it was left behind in the workings of the pit.

The Chairman inquired whether, in the process of creosoting, the quantity of sap extracted was calculated? and how the exact quantity of creosote that was put into timber was ascertained?

Mr. Bethell replied, that at Leith every piece of timber was weighed before it was put into the creosote tank, and again when taken out, and each piece was required to be increased in weight by the process 10 lbs. per cubic foot; the quantity of oil used always rather exceeded the weight gained in the timber, on account of the loss of weight from the moisture extracted by the exhaustion of the air pump.

The Chairman inquired what difference was found in the quantity of creosote absorbed by the hard woods?

Mr. Bethell replied, that oak only absorbed half as much creosote as Menel timber. Common fir creosoted would last double the time of hard wood creosoted, because it took more creosote. Beech made the best wood, being full of very minute pores, and they could force a greater quantity of creosote into beech than any other wood; consequently it took a more uniform color throughout from the process.

Mr. Shipton inquired how the process was regulated to allow for the difference in size of timber?

Mr. Bethell said that long pieces of timber were found to require more time to saturate them in proportion to their length, and the creosote appeared to enter at the two ends, and be forced up through the whole length of the pores. The progress was known by the quantity of creosote forced into the tank after it was filled, according to the number of cubic feet of timber contained in the tank. —*Mining Chronicle.*

ILLINOIS CENTRAL.

The land sales of the Illinois Central road for August, 1858, were \$58,000. The six months' balance sheet of this Company, ending June 30th, shows a decided improvement on 1857. The figures are as follows:

	1857.	1858.
Earnings.....	\$1,067,405	\$887,427
Expenses.....	958,591	707,002
Net earnings.....	\$109,214	\$180,325
Increase in net profits.....		\$171,121

Decrease, September, 1858.....\$26,776 19

NAVIGATION OF THE POLAR SEA.

At a session of the American Association for the Advancement of Science, in Baltimore, in June last, Dr. Isaac I. Hayes, Surgeon of Dr. Kane's last Arctic exploring party, read a paper upon the propriety of continuing the explorations. He thought that the northern limit of land, with the exception of Greenland and Grinnell, had been definitely determined, and doubted the Russian theory that a large continent lies north of Asia. Four attempts at explorations with sledges have been made by the Russians in 1810 and 1822, to look for the northern continent; by Perry, in 1827, to reach the North Pole, and by Dr. Kane, in 1854, to find an open Polar sea. The highest latitude was attained by William Morton and an Esquimaux attached to Dr. Kane's expedition, who found a channel of open water between 80° 25' and 81° 30', and from an elevation of 300 feet at the latter point, looked upon miles of solid ice. The fact of water within the icy limit is thus established, but not decisively a polar sea.

There are other evidences, however, of such a sea. Morton found many aquatic birds which get their food from the sea. An open sea would have a milder temperature than the icy limit, but the isothermal currents fix the point of greatest cold several degrees below the pole. The traditions of the Esquimaux make the north their place of origin, and the remains of colonies are found between 77° and 81°. As we advance southward this race deteriorates, and if they ever inhabited land north of Smith's Straits, there is open water there, for the Esquimaux get their living from the sea. Again, the summer winds from the north, in that latitude, are often warm, and mist clouds are often seen in the northern horizon. The fact of a deep sea current towards the north is also established, in various ways. Facts seem to combine to show the existence of a force or agency, constantly operating to keep the waters of the Polar Sea above the freezing point, which, aided by the wind and other causes, keeps it constantly open.

The most practicable route to be followed to reach this sea, in the opinion of Dr. Hayes, is through Davis' Strait, Baffin's Bay, Smith's Strait, and Kennedy's Channel. He saw no insurmountable obstacle to the successful exploration of this sea, and urged the attention of the association to the subject. The experience of previous expeditions will conduce to its success. A vessel of 100 tons, manned with twelve men, and provisions for two and a-half years, with perhaps a small steam tender, would be sufficient equipment. The expedition should leave America early in April, should stop at the Danish trading posts in Greenland, to secure supplies; should pass the winter at some harbor in Grinnell Land if possible, probably near the parallel of 80°. Early in the following spring the shores of Grinnell Land should be stored with provisions as far north as 82°. A boat's crew should start in April, and would probably meet open water by the middle of June. Dr. Hayes explained the advantages to science to be derived from the success of such an expedition, and announced that he is now endeavoring to organize one. He said that while our flag is carried to the remote heights of the Rocky Mountains, the Andes, and the Cordilleras, we should not forget that it now floats upon the northernmost point of land yet discovered, and demands further investigation in the same direction.—*Hunt's Mer. Mag.*

THE HOUSTON TEXAS CENTRAL R. R.—The *Telegraph* gives a table of the monthly earnings of the Texas Central Railroad for the years ending August 1857 and 1858, and the sum total for each of the years is as follows:

For the year ending August 31, 1857—	
Passengers.....	\$18,778 23
Freight.....	19,567 75
Total.....	\$38,345 98

For the year ending August 31st, 1858:	
Passengers.....	\$31,323 19
Freights.....	62,049 24
Total.....	\$93,372 34

Increase of the last over the previous year, \$55,026 36, showing a gain of 143 per cent. A similar gain the present year will give a total of gross receipts the 31st of next Aug., of \$226,894 78.

This is certainly a very encouraging evidence of prosperity.

The *Telegraph* says the cost of operating the road is about fifty per cent. of the earnings, which will of course leave near \$50,000 to pay for construction, and to pay the interest on the State loan. The amount due on the State loan of \$300,000, is \$18,000 interest one year, and \$6,000 sinking fund. But in addition to the earnings of the road, the company have \$125,000 seven per cent. bonds. This showing given by the *Telegraph* would seem to place the company not only in a position to pay the annual interest and two per cent. for the sinking fund, but also to prosecute the further construction of the road.

☞ The "White Mountains Railroad," by cree of the Supreme Court, will be sold for the benefit of the bondholders, in Bath, N. H. on November 3d, to the highest bidder. The depots and fixtures of every kind are included in the sale. The road extends from Wells River to Littleton—twenty miles.

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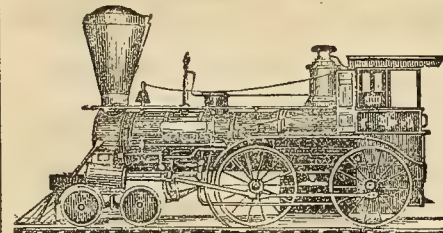
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4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

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7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

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This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

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ROBERT HARRIS, Sup'l.
Racine, May 15, 1857. my21

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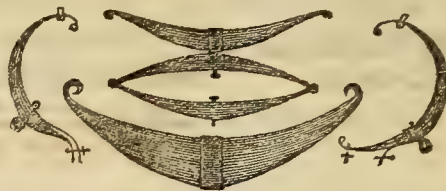
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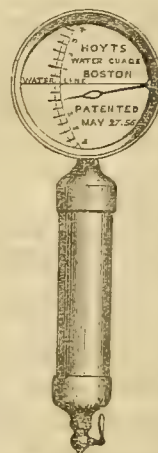
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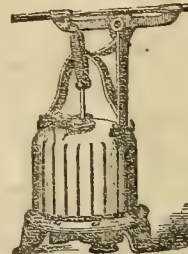
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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....OCT 14, 1858.

Railroad Record

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RESIGNATION.

To the President, Directors, and Stockholders
of the Southern Pacific Railroad Co.:

GENTLEMEN.—My business engagements are such that I am unable, as a Director in your Co., to give its affairs that attention necessary, consequently, as I intimated in my letter to the Hon. E. E. Lott, published in June last, I hereby resign as a Director in the Southern Pacific Railroad Company.

Respectfully,

THOS. B. LINCOLN.

New York, Oct. 1, 1858.

STEAM AND STEAM LOCOMOTION.

This very interesting subject seems recently to have excited new attention—especially in relation to its history. MR. EDWARD EVERETT, in a recent oration made in Massachusetts, devoted a large space to the history of the early ideas on this subject, and mentioned—as *facts*—two or three points which we had not seen before, but which rest on rather doubtful evidence. We shall notice them, in turn.

Our correspondent, Mr. Seymour, writes an interesting article on the subject, and questions the claims of Mr. Evans, to certain improvements. In fact, notwithstanding the writings of Dr. Dionysius Lardner, and of the eulogists of Watt, Fitch, Fulton, and Stephenson, the true history of Steam Machinery has not been written. When written, it will be the most interesting chapter in the progressive history of the human mind. For it will be a most beautiful illustration of the general truth, that the whole progress of man not only in society, but in each particular science, discovery, or invention, has been, *step by step*, gradually. There is no going in science, or discovery, *per saltem*, by jumps over all obstacles. The inventor, or discoverer pursues his path over new ground, like the woodsman, on an Indian trail. He has to observe all objects, and make his way by gradual and certain observations, on the signs about him. We shall endeavor to fix a few landmarks in this progress of Steam Machinery, some of which have the subjects of much controversy, although now well proved.

1. How and when came the idea of Steam Machinery? Or, rather, when, by whom was suggested the idea of raising steam, as the motive power of Machinery? There is a great deal of romance about the early introduction of steam, as a motive power, some of which may be true.

The ABBE HUE, who wrote an account of China and Tartary, and of the Jesuit Missions there, says this of *Verbiest*, one of the most remarkable of Missionaries, who flourished at Peking, about the close of the seventeenth century:

"In his learned work, entitled *Astronomia Europæa*, there is a curious account of some experiments that he made at Peking, with what we may call steam-engines. He placed an *æolipile* upon a car, and directed the steam generated within it upon a wheel to which four wings were attached; the motion thus produced was communicated by gearing to the wheel of the car. The machine continued to move with great velocity as long as the steam lasted, and by means of a kind of helm, it could be turned in various directions."

"An experiment was made with the same instrument applied to a small ship and with no less success; and Father Verbiest, after giving an account of these experiments, adds these very remarkable words:—*Dato hoc principio motus multa alia excogitari facile est.*"

"Who knows whether the first locomotive and the first steam-boat may not have performed their functions in the gardens of the Imperial palace at Peking."

There is no reason to doubt the truth of this statement; but, unfortunately for Chinese priority, Captain Savary's Steam Engine was *then* at work in England, being, as is supposed, formed from the hint given by the Marquis of Worcester's "Century of Inventions." Thus in two opposite quarters of the globe, unknown to each other, persons arose, who, about the same time, conceived the idea of Steam Machinery. This fact, like many others of the same kind, is exceedingly suggestive of the equable and regular progress of the human mind towards the constant objects and means of human improvement.

The Marquis of Worcester was supposed to have given the hint to Savary, who constructed the first practical steam engines. But, where did Worcester get the idea from, if, indeed, he did get it from others? Worcester seems to have been a sort of general experimenter, not particularly gifted in any one department, and did not describe any one of his inventions, so that any body could make a machine from the idea. It is curious to see, what his notions of a steam engine (confessedly the first one published in England,) really was. He says, he could raise water forty feet high, by means of two cocks alternatively and successively turned by a man to let on the steam, and refill the vessel of water!

This was nothing but a tea-kettle, with a steam tube attached to it! And, thus, we see the *germ* of a steam engine. This was in 1663. But, Mr. Edward Everett gives us a romantic story on this subject, which may, or may not be true. He says that, in 1550, or thereabouts, a person proposed to the King of Spain, to build a machine which would do great things by means of steam. The King, however, was obtuse to any such things, and the idea passed into oblivion. We believe this story to be apochraphal. The next statement is rather more plausible, though attended with some marvellous incidents. Mr. Everett says that about 1640, Madame somebody, a notable woman of about one hundred years of age, was going by a mad-house, when one of the confined persons cried out—"He was not mad." The lady was attracted by it, and inquired of him and others, the cause of his confinement; the result of which was, that he claimed to have invented a steam engine; that he had repeatedly gone to Cardinal Richelieu with it, and the Cardinal sent him to the Mad-house, to get rid of his importunities! The finale is, that the Marquis of Worcester was present, and thus got his idea! Whether this be so, it is certain that the Marquis' idea amounted to little beyond a very ingenious tea-kettle. Passing on, we

find Captain Savary, somewhere about 1670, after trying many experiments, succeeded in making a *practical* steam engine, and we are unable to discover, that a useful steam engine was even made before. This was applied, by the York Company, to raising water in London. It is said he destroyed all the copies he could get of Worcester's book, that he might enjoy the entire credit of the invention.

The next great improvement seems to have been *NEWCOMENS*. He contrived a way to make the engine *work with a beam and piston*; and we doubt whether any single improvement in the steam engine was greater than this. The date of this invention was 1705. In 1712 they made an agreement with the owners of a colliery in Warwickshire, and erected an engine with a cylinder twenty-two inches in diameter, and this, says Hutten, was the first engine of the kind erected in Europe. The opening and shutting of the cocks was at first done by hand, but there was combined the present mode, by a beam connected with the machinery.

In a few years, these engines became appreciated, and a great number were erected, and used chiefly in draining mines. The next point of interest, was to diminish the consumption of fuel, and that problem has occupied the minds of steam engine inventors since, and is not wholly solved. In connection with this subject come the next great improvements by *JAMES WATT*. His inventions were patented in 1768. To these were added those of Boulton, and, together, they were chiefly the addition of the condenser, and the reciprocating and rotative wheel engine. Boulton and Watt actually made engines, agreeing to receive in lieu of all profits, *one-third the annual saving in fuel, as compared with other engines*.

As we have heretofore said, it is stated, that Oliver Evans invented the high pressure engine, and conceived the idea of applying the same, as a motive power, to common roads.

Here we may close, for the present, the rise and progress of the steam engine, independent of the objects to which it is applied. We see, even discarding the scientific romance of Mr. Everett, that beginning with a simple boiler, and following each improvement, the progress of this invention has been, step by step, gradually approaching perfection. We venture the prediction, however, that the steam engine is yet destined to further improvement; especially that particular machine called a locomotive. Both the weight and the consumption of fuel will, we believe, be diminished, and much of their unwieldy bulk be taken off.

The great *applications* of the steam engine, the steamboat, and the locomotive, we reserve for a future notice. Even the history of these is not truly written, and to this day,

there seems a sort of mist gathered round the origin of steam machinery.

LOW'S RAILWAY DIRECTORY, 1858.

This is the title of a new work compiled by James W. Low, Jr., containing a correct list of all the officers and directors of all the railroads in the United States, and Canadas, together with their financial condition. No other work of this sort exists, so far as we know, and it is very much needed. We have often felt the want of just such a reference book, and we should think there was scarcely any railroad officer, contractor, or engineer, who does not constantly need it.

This work is arranged alphabetically, and contains the length, capital, debts, names of all the officers and directors of each road, in this country and in Canada. Such a reference book is literally invaluable, and we commend it to all who are interested in Railroad Companies.

STEAM ENGINES AND LOCOMOTIVES.

We publish the following interesting letter from Mr. Seymour, and accompanying it with a comment in another column.

MADISONVILLE, KY., Sept. 23, 1858.

To the Editors Railroad Record:

GENTLEMEN.—I read an article on Railroads in one of your August numbers, a part of which, I think, is incorrect in claiming so much credit for Mr. Evans as it does. I have not by me here, in the country, many books to refer to, to establish this fact; but, I find some evidence that I believe to be important.

It appears from the article referred to, that Mr. G. W. Smith, in the preface to *Woods' Practice on Railroads*, states that the world is indebted to Oliver Evans, a native citizen of Pennsylvania, for the discovery of the latent and unsuspected value and pre-eminent importance of *Railroads*. In 1784, he first conceived the idea of a high pressure steam engine and its application as a motive power to carriages on *common roads*. He urged the importance of railroads in place of canals, and commenced constructing a locomotive steam engine in 1799, which was finished in the winter of 1803-4.

If you will turn to page 110, Vol. I, Macaulay's *History of England*, you will find that the Marquess of Worcester had (in 1663) recently observed the expansive power of moisture rarefied by heat. After many experiments, he had succeeded in constructing a rude steam engine, which he called a fire water work, and which he pronounced to be an admirable and most forcible instrument of propulsion at that time; as stated on the same page there were timber railroads from the mouth of the Northumbrian coal pits to the banks of the Tyne.

You will find in the October number for 1857, of Harper's Magazine, in an article

headed, "The Father of Railways," that Murdoch, an assistant of the famous Watt, not only conceived the idea, but actually succeeded in constructing a model locomotive, which he, one night, undertook to try in a solitary lane near Redruth Church, which started and outran the inventor, and terrified the parish clergyman, who thought his satanic majesty had broken loose.

There is some information in the article alluded to above about railroads and locomotives, but the absence of some dates renders it unsatisfactory. The credit of the first successful adoption of the iron bar on railroads and locomotive steam power as now used, is undoubtedly due to George Stephenson, who is universally allowed to be the Father of Railroads. The first railroad opened for public traffic, worked by the locomotive, was the Stockton & Darlington, in England, on the 27th September, 1825, although locomotives were used on iron strap bar rails, at coal mines, as early as 1811, by Mr. Blenkinsop, of Leeds, and July, 1814, by Mr. George Stephenson.

Complete success in the use of steam power as applied to manufacturing and mining purposes, first crowned the efforts of Watt, some time in the last half, or, perhaps, quarter of the eighteenth century. There were efforts made as early as Mr. Evans', and some earlier, to apply steam as a motive power, which, like his, for some cause, failed, as there were efforts preceding Watt's discoveries, to use steam efficiently in manufactures; but Watt first developed the great utility of steam-power in factory engines, George Stephenson in locomotives, and Fulton in steamboat engines, and, therefore, in the great successes attained in factory, steamboat and locomotive engines, Watt, Fulton, and Stephenson, stand pre-eminent.

Your obedient servant,

CHAS. SEYMOUR, C. E.

MISSISSIPPI CENTRAL RAILROAD CO.

At the date of my last annual report, fifty miles of road track had been laid down; forty miles on the Northern, and ten miles on the Southern division, and regular trains were then running between Grand Junction and the Tallahatchie river. Since that time the road track on the Northern division has been extended to Water Valley, Yalobusha, county—a distance of seventy-two miles from its intersection with the Memphis and Charleston Road, and regular daily trains commenced running to that point on the 18th day of February last. On the Southern division, the track has been extended from Way's Bluff to a point heretofore known as William's Ferry Road, now known as Goodman, a distance of twenty-eight miles from Canton, and regular daily trains are running thereon, in connection with the trains on the New Orleans, Jackson and Great Northern

Railroad, between Canton and the city of New Orleans. The whole length of main and side tracks laid down during the past fiscal year has been fifty-one and one-fourth miles; making in all one hundred miles of main track completed, and leaving eighty-eight miles to be finished. The portion of road now in operation is supplied with sufficient equipments to meet all present demands for the transportation of passengers and freights; but with the increased length of road now to be operated, and its anticipated extension, additional motive power and freight cars will be required to insure an expeditious movement of freight the coming fall and winter.

No new contracts have been entered into during the past year for the construction of any part of the unfinished road bed, with the exception of nine sections of grading on the Southern division, and the trestle bridges on the Northern division, between Water Valley and Grenada. The work here referred to, has been undertaken by well known and reliable contractors, citizens of our own State, at prices and terms of payment favorable to your Company, and will be completed by November next. When this contract shall have been finished, all the earth work on the Southern division, to a point near Middleton, in Carroll county, a distance of sixty-six miles from Canton, will have been completed, and the road bed between Water Valley and Grenada in readiness for the superstructure; leaving only nine sections of light grading, between Middleton and Grenada, not under contract.

A recent purchase has been made of fifteen hundred tons of iron rails, now in New Orleans, and ready for delivery. This amount, with the quantity now on hand, is sufficient to lay down twenty additional miles of track; and it is in contemplation to extend the track with these rails to Coffeeville, on the Northern division, and to Durant, the first station north of the present terminus of the Southern division, at the earliest possible day the means of the Company will permit. Contracts have also been entered into for a sufficient number of cross-ties to lay down the track between Water Valley and Coffeeville; and arrangements will have to be made for an additional supply on the Southern division, to lay down the rails intended for that part of the road.

Convenient freight houses have been erected at all stations on the portion of the Road now operated, with the exception of Canton, with convenient platforms for the reception and shipment of cotton. The erection of suitable buildings at Canton, for the accommodation of the business at that place, and the protection of the engines and cars, should not be longer delayed. Buildings would have been erected there for the purpose here indicated, had the pecuniary means of the Company justified the necessary expenditure for

that purpose. More convenient and comfortable accommodations for passengers, than the Company now have, should also be erected, at several other stations along the line of Road, at the earliest day the Company can provide for the necessary cost.

The repair shop at Holly Springs is now nearly finished. When fully completed and supplied with all necessary tools, the expenditure for repairs that have heretofore been incurred will be materially lessened.

There has been expended in construction and equipment of your road, including all incidental expenses, the sum of \$2,585,318 34.

This amount has been expended on the following accounts:

For Grading.....	\$968,976 49
Iron rails, chairs and spikes.....	785,058 06
Bridging, culverts, and engineering.....	244,554 75
Cross-ties, road crossings, and track-laying.....	165,988 85
Right of way, water-stations, and masonry.....	29,745 41
Depot buildings, grounds, and work shops.....	62,539 85
Equipment, turning tables, and fuel.....	177,725 71
Real and personal property, expenses, stationary, printing, salaries, legal and office expenses.....	68,508 03
Discount and interest on Company and other bonds, interest on loans, and commission.....	82,920 29

Total.....\$2,585,318 34

Which has been derived from the following sums:

On account of subscriptions to the capital stock of the Company.....	\$1,575,474 00
Interest and exchange.....	12,639 03
Net income of Road.....	106,446 11
Funded Debt.....	535,579 24
Floating Debt.....	391,216 79

Total receipts into Treasury.....\$2,621,355 16

Deduct amount now in Treasurer's hands.....36,036 82

\$2,585,318 34

The Funded Debt of the Company consists of—

Loan of Chickasaw School Fund from the State, bearing 2 per cent. int.....	\$181,850 00
Loan from the State of Three per cent. fund, without interest.....	20,949 07
Company Bonds sold, bearing 7 per cent. interest.....	262,760 17
Bonds of the State of Tennessee, bearing six per cent. interest.....	45,000 00
Loan from N. O. J. and G. Northern Road, bearing 8 per cent. interest.....	25,000 00

Total Funded Debt.....\$535,579 24

The Floating Debt consists of balances due and to become due to contractors; notes executed for material and equipments, and for temporary loans of money to enable the Directory to continue the work on the road. A portion of this indebtedness will be funded by agreement with the parties to whom it is payable, and the remainder will become due during the fiscal year.

Your secretary reports the assets of the Company applicable to the liquidation of the Floating Debt, and the further prosecution of the work of construction, to consist of the following items and amounts, viz:

Cash Bills receivable, and other assets in the hands of the Treasurer.....	\$ 36,036 82
Amount due and to become due on Subscriptions to Capital Stock.....	252,677 67
Amount to be received from the State on the Chickasaw School Fund loan.....	18,150 00
Amount (Estimated) to be received from sale of Internal Improvement Lands.....	65,000 00
Estimated net income from the Road the present fiscal year.....	175,000 00
Amount of First Mort. Bonds of the Company unsold.....	1,087,000 00

Total.....\$1,633,864 49

From this amount should be deducted Unreliable subscriptions to the capital stock of the Company.....60,000 00

There remains.....\$1,573,864 49

If these assets can be made available during the present and succeeding years, the Road may be completed by the 1st of January, 1859. Unless this is accomplished, its final completion may be long delayed, the Stockholders deprived of its profits, and the public of its benefits.

Of the amount of the Company's Bonds sold, \$217,500 have been taken by citizens of this State, and \$45,000 purchased by residents of other States.

This sum of \$617,543 32 was derived from the following sources, viz:

On account of Subscriptions to the Capital Stock of the Company.....	\$153,303 41
Company's Bonds sold.....	170,812 76
Bonds of the State of Tennessee sold.....	8,273 18
State Loan of Three per cent. Fund.....	20,949 07
Income of Road.....	115,679 37
Bills Payable.....	148,525 53

Total receipts.....\$617,543 32

The payments from the Treasury during the fiscal year have been on the following accounts, viz:

For Construction and Materials.....	\$505,199 07
For Equipments.....	50,340 40
Stationary, Printing, Salaries, Legal and other expenses.....	14,063 23
Discount and Interest on Funded and Floating Debt.....	12,299 32
Road Expenses, Repairs of Road, and Equipments.....	51,978 31

Total.....\$633,800 35

Leaving in the hands of the Treasurer, at the commencement of the present year, \$36,036 82.

NORTHERN DIVISION.

The superintendent of the Northern division, reports the gross earnings of that division, for the year ending 30th April last—

From passengers, freight and United States Mail.....	\$108,570 62
Expenses of operating, repairs and maintenance of way.....	54,631 65

Net receipts.....\$53,938 97

The seeming discrepancy in the amount of operating expenses, as reported by the Treasurer and Superintendent, originates in outstanding claims chargeable to that department. The superintendent reports all expenses incurred, the treasurer only the amount that has been paid.

The average length of Road operated during the year has been fifty-five miles. The gross receipts have been \$1,968 36 per mile; the nett receipts \$981 23; and the operating expenses \$993 29 per mile, or 50½ per cent. of the gross income.

SOUTHERN DIVISION.

The Superintendent of the Southern division reports:

From Passengers.....	\$3,240 25
Freights—down.....	2,566 54
Do. —up.....	1,291 96

Total receipts.....\$7,098 75

Operating expenses have been:

For conducting transportation.....	\$ 460 38
Maintenance of way.....	2,586 12
Motive Power.....	1,599 49

Total expenses.....4,645 99

Making the Gross Earnings.....\$2,452 76

—More than the working expenses on an average length of nineteen miles of road.

Mr. Frost reports the road track on his Division in good order, and entertains favorable views in regard to its respective business. He recommends that additional equipments be obtained for that part of the Road before the commencement of another business season.

The engineer in chief gives a detailed statement of the cost of that part of the Road now completed, the progress of the work since he has been in charge, and an estimate of the cost of completing the residue of the road, and the equipments that will be required therefor. He states the aggregate cost of the most expensive part of the road from Grand Junction to Water Valley, to have been \$1,416,068 57, or \$19,875 per mile, exclusive of equipments, and that part of the Southern division of the road, now completed between Canton and Goodman, to have cost \$436,339 60, including an estimate of \$19,000 to be hereafter expended in the completion of the Bridge across Big Black river, or \$16,012 00 per mile. His estimates of the cost of completing the unfinished portions of the road are as follows:

For the local work, including bridges, trestles, etc., between Water Valley and Coffeeville.....	\$ 19,860 66
Coffeeville to Grenada, including bridge on Yalobusha river.....	45,242 21
Grenada to Shangalo.....	99,230 60
Shangalo to Goodman.....	107,125 00
Total estimated cost of Local Work between Water Valley and Goodman.....	\$271,448 47
For iron rails, fastenings, spikes, delivered on the line of Road, and track laying, from Water Valley to Coffeeville.....	\$ 94,554 65
Coffeeville to Durant.....	451,655 90
Durant to Goodman.....	57,935 39
Total for track and track laying.....	\$604,145 94
From this amount deduct the value of iron rails and other material on hand.....	\$121,085 60
And there remains.....	\$483,060 34

The aggregate estimated cost of completing and equipping the unfinished portion of the road as exhibited by the chief engineer, is:

For all local work, including bridging and cross-ties.....	\$271,448 47
Iron rails, chairs, spikes and track-laying.....	483,060 34
Additional motive power and rolling stock.....	256,500 00
Depot buildings, engine houses, machine and repair shops, water-stations, turntables, etc.....	51,200 00
Engineering and contingencies.....	20,000 00

Total estimated cost of work to be done, and material to be supplied.....\$1,082,208 81

The largest item of estimated future expenditure is that for iron rails. The market value of this article is as variable as that of any other commodity. If the amount required to complete the road could be purchased at present cash prices, it could be laid down on the road at much less than the estimated cost; on the other hand, if it has to be purchased on time, at the present depression of railroad credit, it may cost more than the estimate. Any additional price that may be allowed for delay of payment, will be a loss to the Stockholders. Should, however, the road be completed and equipped within the limits of the estimate of your chief engineer, then your entire road will have cost \$3,519,-854 88, or \$18,730 per mile.

To make the road of the first class for passengers and freight, it should be completed in the most substantial manner, and of the most durable materials. Economy of future repairs would dictate this course.

LOCAL TRAFFIC.

The average annual amount of cotton, now produced in the district of country within twenty miles of the Central Road, is 192,990 bales, which, at present value, is worth \$8,749,500; and of corn, 8,083,119 bushels, worth \$4,041,559 50. Let it be remembered that all the cotton grown is exported—none is consumed within the State—involving an outward movement of freights equal to the whole amount produced.

Having presented the foregoing statement, I submit the following estimate of local traffic on your road, when completed:

150,000 local passengers, at an average of 50 miles travel, and at \$2 each.....	\$300,000 00
125,000 bales cotton, at \$1 each.....	125,000 00
Incoming freights—although past experience would justify a larger amount—say.....	150,000 00
Miscellaneous items.....	25,000 00

Total estimated earnings from Local Traffic.....\$600,000 00

With these statements the directory feel justified in making the following estimates of future earnings therefrom:

Through Passengers.....	\$583,568 00
Through Freights.....	150,000 00
United States Mails.....	40,000 00

Total estimate of Through Traffic.....\$773,568 00

To this sum add the estimated receipts from Local Passengers and Freights..... 600,000 00

Total estimate of Gross Earnings.....\$1,373,568 00

Deduct 50 per cent. for Expenses..... 686,784 00

Total estimated Net Earnings.....\$686,784 00

TREASURER'S REPORT.

To balance on hand April 30, 1857, as per Report, consisting of Cash, Bills Receivable, etc.....	\$ 52,293 85
Amount received on account of Capital Stock paid in.....	153,303 41
Amount received on account of Company Bonds sold.....	170,802 76
Amount received on account of Tennessee Bonds sold.....	8,273 18
Amount received on account of Three Per Cent. Fund.....	20,949 07
Amount received on account of Freight and U. S. Mail.....	66,973 35
Amount received on account of Passengers.....	48,706 02
" " " Bills Payable.....	148,335 53
Total.....	\$669,837 17

By payments on account of Construction:—For grading, grubbing, clearing, right of way, iron rails, chairs and spikes, superstructure, track-laying, bridges, trestles, culverts, turn-tables, depots, section houses, engine houses, shops, etc.....	\$505,099 07
On Account Equipment:—For engines, passenger and freight cars, depot balances, etc.....	50,340 40
On Account Contingent Expenses:—For salaries of officers, attorneys' fees, stationary, printing, etc.....	14,083 23
On Account Discount and Interest:—For Discount on State of Tennessee, six per cent., Bonds, and Interest on same, and C. S. Fund.....	12,299 32
On Account Conducting Transportation:—For maintenance of way, maintenance of engines, maintenance of cars, motive power, and pay of train hands, and loss and damage.....	51,978 33
Balance in my hands, consisting of cash, Bills Receivable, and Other Available Assets.....	36,036 82
Total.....	\$669,837 17

OFFICERS OF THE COMPANY.

W. Goodman, *President*; W. F. Mason, *Treasurer*; A. J. McConnico, *Secretary*; Robert Sterling, *Chief Engineer*; E. G. Wall,

Superintendent Northern Division; E. D. Frost, *Superintendent Southern Division*.

DIRECTORS.

W. Goodman, Alex. M. Clayton, Marshall County; James Brown, M. M. Pegues, Lafayette County; Hugh Torrence, P. Randolph Lee, A. S. Brown, Yalobusha County; G. F. Neill, C. M. Veriden, William Booth, Carroll County; A. M. West, Elias Taylor, Holmes County; Joseph N. Davis, Madison County.

SOUTHERN PACIFIC RAILROAD.

No one who has investigated with care the condition of the Southern Pacific Railroad Company, and the peculiar causes of its financial embarrassments, can have entertained a doubt, that, with prudent management and energy, the enterprise must be crowned with ultimate success. The accession of Dr. Fowlkes to the presidency, a gentleman so distinguished for sagacity, unimpeachable integrity, and decision of character, reanimated the hopes of the stockholders, while his conciliatory but determined subsequent action is beginning to have its influence in reconciling the conflicting claims of the old and new companies. His well directed exertions have stimulated those in immediate interest to a prompt payment of the required assessment, while he has been industriously working at the same time to counteract the obstinacy and remedy the bad management of those who formerly directed the affairs of the company. The result has been a growing confidence on the part of the *bona fide* stockholders in Kentucky, Tennessee, Missouri, and other States, that their investments will be rendered secure and in a short time remunerative. This road is not merely a Southern necessity—it is a great national measure, in the prosecution of which all sections should cordially unite. We can not see any other practical or available route to the Pacific, and the knowledge that it may be completed before Great Britain penetrates the continent through its own provincial territory, should stir the patriotic exertions of our citizens. The unanimity with which Dr. Fowlkes has been every where sustained leaves no doubt that a sum will be raised amply sufficient to pay of all the pressing liabilities of the company, and leave a reserved surplus for the active prosecution of the work. The Doctor is probably by this time in Texas, and the *Marshall Republican* of the 17th ult., when anticipating his arrival daily, said:

"When he comes we confidently look for a compromise upon such a basis as will settle all past differences, produce harmony of feeling, and enlist the co-operation of every friend of the enterprise. This can be accomplished if all who are interested will lay aside personal feeling and prejudice, and consult their individual and the public interest. The two companies have now an opportunity of removing every obstruction which has impeded the work, and to place the enterprise in the hands of such men, and under such wholesome restrictions as will insure its success. The creditors are languishing for their money, and the public demand the road. The creditors have found that a trust sale may be a good thing in its way, but that in the present instance it has not turned out the thing they bargained for. With money enough to pay up all the indebtedness—in cash—and with the prospect of several hundred thou-

sand dollars more to be spent in Texas immediately, belligerent parties, we imagine, will manifest a degree of good sense, good feeling, and practical reflection, which will surprise even their best friends."

"We know they can do otherwise. They can be obstinate and prolong the litigation, stop the road where it is for years, and keep the creditors out of their money. But they will do it at their own expense, and under a heavy responsibility. Under this state of things, public sentiment will demand the forfeiture of the charter, and when gone, it will never be renewed; whereas, if all the parties will go to work in good faith to place the enterprise in a condition to inspire confidence, there is nothing whatever to be apprehended from the State."

From this it will be seen that the united action of the stockholders, in adopting the suggestion of Dr. Fowlkes, can bring about the very condition of affairs for which our Marshall cotemporary hopes. When the President reaches Texas with the assurance that funds will be promptly raised to pay up all indebtedness, those who claim an interest in the road, under the clearly illegal trust sale, will obviously adopt the conciliatory policy which the Republican suggests, for it would be madness to persist in a stubborn course, which might lead to the forfeiture of the charter under the weight of public opinion, and destroy all possible chance for the completion of the road. The State of Texas has too great and vital an interest in this great work to throw obstacles in the way of its prosecution, or to suffer mere factious or selfish opposition to embarrass it. We look forward, therefore, with solicitude, but with every degree of confidence to the next advices from Dr. Fowlkes, and his report upon the means he has taken to compromise all matters in dispute between litigant parties.—*Louisville Journal.*

LEXINGTON AND DANVILLE RAILROAD.

One more pull—a strong pull—and a pull altogether—and we confidently believe this most important work can be finished to this place.

The attention of distant capitalists has been recently turned in this direction, and there is no doubt, that if Boyle and Mercer counties will go to work in good earnest, aided by Fayette and Jessamine, that the amount required (\$500,000) can be raised. We are assured that three-fifths of that sum will be contributed by persons at a distance, leaving only \$200,000 to be subscribed in Kentucky.

But for the long delay and disappointments in our previous hopes and expectations, we doubt not this sum could be raised this side of Kentucky river. But we have now bought our experience, and that is said to be the best sort, and we have seen what has been done for Jessamine county by the extension of the road to Nicholasville. We are reliably informed that the \$100,000 in stock and bonds paid in that county, have been already more than returned, by the diminished price of hauling their surplus wheat to market.

They may be satisfied to let the road stop, and so may Fayette, but our situation is very different. They have reached the promised land, but we are on "the other side of Jordan," and must work on—alone if necessary—till we are similarly situated. No brave man gives up a contest by reason of one rebuff. No wise man will abandon a great enterprise, because the ignorance, or imbecility of an

agent, may have jeopardised its success. No good hunter ever gives up the chase, because his faithful rifle sometimes snaps—on the contrary, he will always pick the flint and try again.

So much for the present, more hereafter.—*Weekly Tribune.*

MICHIGAN CENTRAL RAILROAD.

We have received the report of the Michigan Central Railroad Company for the year ending May 31, 1858. The earnings for this year are \$2,428,757 52 against \$3,104,602 69 last year—loss \$675,845 17. Disbursements this year \$1,531,218 04 as against \$2,083,199 36 last year, net decrease \$551,981 32. The report says:

Previous to January 1st of the present year, the operating department was charged monthly with all the money expended for it. But as the expenditures included materials bought for future consumption, it was thought that a change in the system, by which all materials purchased should be charged to a separate account, and each division of the operating department be debited with the actual labor and material used, would be an improvement, by showing monthly the real cost of working the road.

A new system, in accordance with these views, was established on the 1st of January last. By furnishing an exact comparison between the different months, it will afford the means of exercising a stricter control over the expenditures, the accountability will be more direct and therefore effective; and the efforts of the officers and managers to economize, being more intelligently directed, will secure more practical results.

Operating disbursements for year ending May 31, 1857... \$2,083,199 36
Less increase of materials on hand during that year..... 216,304 51

Actual expenses of operating the road.... \$1,372,894 85
Operating disbursements from June 1 to Dec. 31, 1857..... \$957,179 87
Add for decrease of materials on hand during that time.... 132,554 32

Expense of first 7 months.... \$1,069,734 19
Expense for the other five months..... 574,038 17

Operating expenses for past year..... \$1,663,772 36
Showing a saving during the year..... \$209,122 49

It will be noticed in the comparative table of operating disbursements and the statement of decrease of materials on hand, that there was no saving, but rather an increase of expenses during the first half of the last year over the previous one.

We were then experiencing all the evils incident to an active competition, consequent high speed of trains, and outside expenses. With the financial crisis came a cure to most of these evils. The great lines of competition found means of negotiating with each other for the common good, and the speed of trains has been reduced to a reasonable rate, and outside expenses principally discontinued.

The prices of labor and materials have fallen from the high rates before ruling, and our efforts to reduce the working expenses have, since the opening of the present year, met with considerable success.

Savings in expenses for the first five months \$232,091 63
The gross earnings of these 5 months have in the aggregate fallen below those of the last year, by the sum of..... 227,713 34

Showing a net gain for the five months of \$5,277 79

A part of this large saving in expenses is due to the mildness of the winter, but much to the causes before alluded to.

During the year a little over 47 miles of

rails have been rolled at a cost of \$144,388 59, and charged to operating expense; 23 long freight cars have been built and charged to the same account, and it is believed that the entire property of the Company has been fully kept up, and was never in a more efficient condition for service than now.

No expenditure on construction account is recommended for the next year, nor is it believed that any of importance will be required for several years, the equipment and facilities of every description being ample for a very large business.

A contract was entered into last season with the Michigan Southern Railroad Company, to take effect November 1, 1857, by which the through passenger business is divided equally, and we divide equally with them all the through freight business we do over 58 per cent., and they divide equally with us all they do over 42 per cent. We had been doing a larger proportion of the through business than this division gives to our Company, but as it was not probable it could be closed on more equitable terms, with the hope that their through business would become more prosperous, we conceded the difference rather than continue the competition existing before. This contract is to continue one year from the first of November, unless revoked on thirty days' notice by either party; under it most of the outside expenditures are discontinued.

The transportation business upon the lakes has been so unprofitable for the last two years, and the prospect for the present season being still worse, we have laid up the Company's steamers and made arrangement for a line of propellers to fill their place this season upon the North Shore Route, at their own risk as to profit or loss. For freight and emigrants these will answer all the necessities of the trade, and the steamers will not be required again until a change for the better occurs in the Lake business.

The business of all the Western States has been very much depressed since last Autumn, but their resources are very great and their elements of prosperity can only be temporarily checked, soon to return to their usual channels of rapid growth and substantial progress. With the renewal of business in that region, the earnings of our road will come up again, and we have reason to hope that the experiences of the past year have permanently done away with many of the causes of unprofitable expenditure, and will be the means of promoting stricter accountability and a more conservative management of this species of property, and if so, the disasters of the year may result in permanent benefit to the railroad investments of the country.

From the Treasurer's report it appears that the bonded debt has been increased during the year past, in the sum of two million four hundred and forty-seven thousand five hundred dollars..... \$2,447,500 00
The present value of assets (including cash in hand) is less than at this time last year in the amount of..... 399,456 57

Total..... \$2,846,956 57

This amount has been disbursed as follows:

Reduction of Floating Debt.... \$1,332,247 14
Reduction of cap'l stock, fractions purchased..... 252 60
Of Dividends due June 1, 1857, since paid..... 191 00
Refunded amount borrowed of Income Account..... 477,384 35
Construction expenditures Joliet & Northern Ia. R. R. Co. 28,606 99
Construct. expenditures Michigan Central R. R. Co..... 998,981 39

\$2,846,956 57

The expenditures for construction during the year amount to \$998,281 39, by far the

greater portion of which arises from the discount on the loan advertised for by the Company in October last and awarded to the highest bidders in November. The best interests of the Company seemed to demand that this sacrifice should be made, that its credit might be protected from prolonged disrepute, and although, in consequence of the financial distresses of the time, the rate obtained for the bonds was far below their intrinsic value, yet it is believed that the sale was warranted by the magnitude of the objects attained, viz: the extinguishment of the floating debt, and the early restoration of the financial credit of the Company.

The whole item of discount on bonds was debited to construction account, for the reason that nearly the entire proceeds were used for the payment of indebtedness incurred for this account.

Our floating debt and bonds maturing previous to the year 1860 are as follows:

Floating Debt maturing in June.....	\$15,250 00
" " " July.....	38,826 35
" " " August.....	14,500 00
Total floating debt.....	\$113,576 35
Bonds overdue not yet presented for payment.....	\$2,950 00
Bonds maturing July 1, 1858.....	130,350 00
" " " August 1, 1858.....	5,750 00
" " " Sept. 1, 1858.....	14,000 00
" " " Oct. 1, 1858.....	39,250 00
" " " Nov. 1, 1858.....	1,950 00
" " " Dec. 1, 1858.....	1,000 00
" " " Jan. 1, 1859.....	46,500 00
" " " Feb. 1, 1859.....	1,000 00
" " " March 1, 1859.....	2,000 00
" " " April 1, 1859.....	2,000 00
" " " July 1, 1859.....	256,000 00
" " " Oct. 1, 1859.....	1,000 00
Total.....	\$622,526 35

Of this amount there matured previous to July 1, 1859, \$365,526 35. To meet the earliest maturing of these obligations, the Company has now on hand in cash, money loaned on call and assets available at once, \$216,000, leaving but \$149,526 35 to be provided for out of the net receipts of the next two months, to meet all liabilities maturing previous to July 1, 1859.

Of the bonds falling due July 1, 1859, \$250,000 were issued to enable us to take up bonds maturing in the early part of the year, installments on new loan not being realized in time to meet obligations as they matured.

Our whole bonded debt matures as follows:

At various times previous to the year 1860, as above specified.....	\$503,950 00
During the year 1860.....	1,394,000 00
" " " 1861.....	3,077,000 00
" " " 1862.....	463,613 33
" " " 1863.....	2,845,500 00
Total.....	\$8,284,063 33

Should the business of the coming year prove moderately good, it is reasonable to expect that our net earnings will be sufficient to enable us to pay such portion of these bonds, as the realized portion of our assets will not by that time have provided for, and beyond this leave a margin for a moderate dividend.

The Superintendent's report says:

The arrangement made between this Company and the Michigan Southern and Northern Indiana Railroad Company, resulting, among other things, in the withdrawal of the steamboat lines of both from Lake Erie, made it necessary to form, with other parties, some other kind of water communication between Buffalo and Detroit; and a satisfactory arrangement has been entered into for this season, with the Western Transportation Company, for supplying the route with a daily line of first-class propellers, thus keeping up this through connection, via Lake

Erie, on the north shore, for freights and the lower classes of passengers, this Company assuming no risk of loss on the Lake. Although some first-class passenger business may, and probably will be lost to the Company by the withdrawal of its steamboat line, the general falling off in the passenger business of the country justifies the belief that it was wise to do so this season. The Cleveland line of steamers, owned by other parties, is run this year as formerly, a boat leaving each end of the route, in the evening, in exclusive connection with this Company in through business.

In the arrangement of time-tables at the Convention, the feeling was unanimous for the reduction of speed, and it was arranged with competing lines, so that the trains of this Company were not only reduced in number, but also in speed, the average for passenger trains being fixed of about 22 2-3 miles an hour. The result of running at this moderate speed was very satisfactory, the trains during the entire winter being always on time, and breakages incident to winter service, almost entirely avoided.

The average time of passenger trains last Summer, between Detroit and Chicago, was eleven hours and twenty-eight minutes; this Summer, twelve hours and thirty-two minutes.

The total disbursement on account of operating the road is \$1,531,218 04, being less than the corresponding accounts of last year by \$551,981 32. The earnings of the road being \$675,845 17 less than last year, leaves a deficiency in net earnings, as compared with last year, of \$123,863 85.

In the accounts this year, however, as well as last, there are large sums for renewals and other extraordinary expenditure, that properly do not belong to the legitimate operating expenses of the road, and which this account will be materially relieved of the coming year.

A large part of these extraordinary expenses were incurred during the first half year, while new rails were being paid for and going into the track. It was not practicable to reduce the general expenditures of the line until near the close of the first six months; but after getting the iron in, and the road in good order for winter service, with a prospect of a light business during the winter months, a large reduction in working force was made, not only upon the track, but in all the different branches of service, and the reduction in number of trains and their speed, and continued good condition of track during the winter and spring months, have kept down the working force, in all departments of repair, to a degree that shows very plainly in the last six months' account. A general reduction of wages was made at the time of reducing the force, and the men retained in the shops on the entire line were put upon short time, which plan should be continued until an increased business requires a change of policy.

ROCK ISLAND RAILROAD.

We have received a copy of the Annual Report of the Rock Island Railroad Company. The figures show a decrease of \$221,010 in net earnings, and in gross earnings of \$478,351. The present balance of the income account is \$537,453 37. The capital stock is \$5,603,000, of which the Company owns and holds \$101,500. The number of employees has been reduced from 1,767 to 953, and the pay from \$55,624 per month to \$26,479. The Report says:

It will be seen that the net earnings of the year have been over 7 1/4 per cent on the outstanding stock—a result with which the Directors, considering the peculiar circumstances which have combined to depress the business of the country and diminish the earnings of railways during the past twelve months, can not but feel well satisfied. The road-bed and all its equipments, as reported by the Superintendent, were never in so good condition as at the present time. The floating debt of the Company has been paid off, and there is on hand a large supply of fuel and materials for future use. There has been paid on construction account since the date of the last report, \$147,845 78 for additional side-track, station buildings and fixtures, lands, &c., the larger portion of which were incurred in the preceding year. The equipment of the Company is ample. It is very difficult if not impossible, even when there is urgent necessity, immediately to curtail operating expenses to the grade of decreasing receipts. Hence several months necessarily elapsed before the reduced expenditures exhibited by the tables annexed could be accomplished.

Economy has always been practiced, but when business is large and pressing it is not easy to guard expenses so closely as when there is less to do, and labor is more readily obtained. The utmost vigilance in this respect has been, and will continue to be exercised, and the Company is under obligations to the officers and heads of departments for the care and energy with which they have carried out the views of the Directors. The passenger and freight trains, both over the road and over the Rock Island Bridge, indicate a larger traffic West than East, and an increase in numbers and wealth in the State of Iowa. The connection, therefore, with the Mississippi and Missouri Railroad can not fail to afford an increasing business from that enterprising and growing State, as the length of the Mississippi and Missouri Railroad increases. Upward of 100 miles of this road are completed; 20 additional miles having been opened on Sept. 1, and 100 miles more are under contract, with a good prospect of completion at no distant day.

Balance Sheet of the Chicago and Rock Island Railroad Company, July 1, 1858.

CREDIT BALANCES.	
Capital Stock Account.....	\$5,603,000 00
Mortgage Bonds.....	1,397,000 00
Unpaid Dividends.....	\$7,000,000 00
Northern Indiana R. R. Co. unadjusted bal.	492 50
Profit Balance of Income Account.....	5,158 00
	537,453 37
DEBIT BALANCES.	
Cost of Road and Equipment.....	\$6,776,118 53
Railroad Bridge Company.....	161,380 00
Illinois & Mississippi Telegraph Company..	13,785 52
Chicago & Rock Island Railroad Stock.....	101,500 00
Stock of Fuel on hand.....	160,135 44
Iron and other Materials on hand.....	125,641 67
Balances due from other Roads, and Cash in Cashier's hands, Chicago.....	150,299 96
Sundry small balances.....	4,408 25
Cash in Bank.....	49,834 45
Total.....	\$7,543,103 87

The Michigan Southern Road earned, in the fourth week of September, as follows:

Passengers.....	\$30,555
Freight.....	28,719
Mails.....	1,047
Total.....	\$60,331
For the month of Sept., 1858.....	\$208,498
For the month of Sept., 1857.....	233,833

Decrease.....\$25,395

To the above \$208,498 there is to be added miscellaneous receipts, which will bring the earnings nearly to those of 1857.

ARTESIAN WELLS AND GEOLOGY.

BY DAVID CHRISTY.

"SOMETHING FOR GEOLOGISTS.—The attempt to bore an Artesian well at Columbus, Ohio, seems likely to be a failure. The shaft, on the 6th of July, had penetrated to the depth of one thousand seven hundred and eight feet. Fifty feet more will complete the last contract between the State House Commissioners and the parties who are performing the work. The limestone strata seem to eclipse by far any thing of the kind ever before heard of in the geology of the country; and as the shaft has already been sunk into it upward of one thousand feet, the future alone can tell how much deeper it must be sunk to reach the other side."

The foregoing paragraph is passing the rounds of the papers. Its writer knows but little of the geology of the country, or he would not assert that a thousand feet of limestone eclipses by far any thing of the kind ever heard of before. The Commissioners, doubtless, acted upon the common notion that water can be made to overflow at the surface, at any point, by boring deep enough. Geological science does not sustain this theory, and it may be well to see what are the facts connected with the subject.

Artesian wells are obtained by boring into the earth's crust, till subterranean streams or reservoirs of water are reached; but unless these streams have their sources at an elevation higher than the mouth of the wells, the water can not rise to the surface. Such borings have produced an abundance of water at Paris and other places in France, and also in the United States, in portions of Mississippi, Alabama and South Carolina. To gain a proper knowledge of this question, and ascertain why one district will yield water in every boring made to the proper depth, while another will yield none, we must examine the difference in their geological characteristics. Geological science, alone, can solve the mystery.

Surrounding Paris, at a considerable distance from the city, there appears at the surface an immense bed of porous silicious rock, through which water easily percolates, and which rests upon strata impervious to water. The strata of this porous bed of rock dip in all directions toward the city, indicating that it passes beneath it. It thus forms a vast basin, having a depth of about fifteen hundred to two thousand feet at its center. This basin is filled by the rocks of the chalk and tertiary formations, so as to bring the surface of the country to nearly a common level—the outer rim of the basin, however, having a higher elevation than its center. The chalk formation rests upon the porous silicious rocks, and is impervious to water. The tertiary formation overlies the chalk, and the two together have a thickness of many hundred feet. The rains, falling upon the outer margin of the basin, sink freely into its porous materials; and, keeping the strata constantly saturated with water, create a pressure of that fluid toward the center. These porous rocks may, therefore, be called *water-bearing*, as an abundant supply of water everywhere pervades their strata, where its evaporation is prevented by the overlying chalk. By boring through the tertiary and chalk formations into the porous strata, at suitable distances from the margin of the basin, the water is forced up to a height corresponding to that of the source of its supply, and in some cases reaches an elevation of thirty feet above the surface. The Artesian well in the city of Paris is bored to a depth of one thousand seven hundred feet, and the water rises to an elevation of sixty feet above the surface, and has a temperature of ninety-four degrees, Fahrenheit. The first well of this kind was bored at Artois, in France—hence the name *Artesian wells*.

The point to be noted here is, that the basin, at Paris, is everywhere underlain by *water-bearing* strata, and that water can be obtained by boring into it anywhere, at suitable distances from its margin.

In Mississippi and Alabama, the region furnishing Artesian wells, is not in the form of a basin, as at Paris, but is an *inclined plane*, com-

mencing near the base of the Alleghanies and descending toward the Gulf of Mexico. The *water-bearing* formation of this section of country is a loose sandy deposit. It is overlaid by the chalk and tertiary formations, which are known, locally, by the name of *rotten limestone*. It is an immense deposit of carbonate of lime, existing mostly as pure *marl*, but occasionally including some beds of limestone, and in many places abounding in fossils. It has often a thickness of only a few feet at its northern margin, but increases rapidly in depth southward, till it attains a thickness of near one thousand feet—the increase, in some localities, being at the rate of thirty feet to the mile. The marl is impervious to water, and none can penetrate down through it, however heavy the rains at the surface, or rise up through it, by capillary attraction, whatever may be the extent of the evaporation from the soil above. Planters dig cisterns into it, in the form of demijohns, and fill them with water from the roofs of their buildings. These cisterns require no wallings of cement to make them water-tight, and retain the water during summer in all its original sweetness.

The bed of sand which underlies the marl, must be of considerable thickness, as it has been penetrated to a depth of three hundred feet in some of the Artesian wells. It rests upon the older secondary rocks, which, being impervious to water, serve as a flooring to the sand and prevent the water from sinking lower in the earth. This sand-bed occupies the surface all around the northern margin of the marl, and the rains descending upon it are readily absorbed. The water thus supplied is arrested in its descent by the flooring before described, and it flows along the inclined plane, among the sand, till it passes beneath the great marl-bed, from whence there is no retreat or escape except by a forward movement. Far down toward the coast, where it has gained power by accumulation, the water is found bursting up through the marl in large springs.

Now, it must be apparent, that the imprisoned water, below, will rise through the marl to the surface by an artificial opening as readily as it does by the openings created by its own powers or by other natural causes. Accordingly, wherever Artesian wells have been bored at proper distances within the marl formation, water has been secured; but when the attempts have been made at points too near its northern margin, they have either failed, or the water does not rise to the surface. The more northern ones, in Alabama, have a depth of two hundred and seventy to three hundred feet—the water rising in them to within eighty or ninety feet of the top, from whence it is drawn by the windlass. There are others in the river valley, near by, which is eighty or ninety feet lower, in which the water overflows at the surface. Further south, where the common level of the country is a hundred feet lower, the Artesian wells have the water flowing from their mouths in a constant stream, but, owing to the increase in the thickness of the marl in that direction, they have to be sunk to the depth of five hundred to eight hundred feet to reach the water.

In all these wells the water rises to a common level, whether it stops at ninety feet below the surface, barely overflows at the top of the well, or ascends in tubes prepared to allow it to reach its maximum elevation. This shows clearly enough, that the water has a common origin in a single broad bed of *water-bearing* sand, which everywhere underlies the whole region covered by the rotten limestone. Some exceptions have to be made to this general statement. It has been said that the sand-bed includes some strata of hard sand-rock. These strata are at different depths, and some of them serve as floorings for the water, or secondary lids to the basin, or rather to the inclined plane upon which the water runs. Consequently,

after reaching the water immediately below the marl, if the boring is continued two hundred or three hundred feet through these strata of sand-rock, it will rise to a higher elevation than when first reached. This is only true, however, of points distant from the margin.

It is fifteen years since the writer visited that region, and much new information might now be collected by the geologist. Facts enough are here given, however, to enable the reader to understand the laws governing the Artesian wells of the South. The geological position of the one at Charleston, South Carolina, is similar to those of Mississippi and Alabama, and need not be described.

The opinion was expressed, when in Alabama, that water in sufficient quantities for propelling machinery, might be obtained by increasing the number of apertures through the rotten limestone, or by enlarging the size of any one of them where the water rose ten or a dozen feet above the surface. This has since been done, and mills have been erected in the open country, far distant from any natural water-power—the water turning the wheels being supplied from five hundred to eight hundred feet below, through a half-dozen openings made by the auger.

It will be seen that the geological conditions of the district described, are identical with that of the Paris basin, in every particular essential to the existence of Artesian wells. In both, the borings are made through the tertiary and chalk formations, into an underlying silicious deposit, which is *water-bearing*, and which is nearly uniform in its thickness and qualities, so as to make it practicable to obtain water anywhere within its limits, excepting near the margins.

We are now prepared to consider the Artesian well question at Columbus, Ohio. The geology of the surrounding country is the first point to be examined. This is necessary, in order to determine the character of the rocks which underlie that city. The task is an easy one, as the geology is not complicated. The strata vary but little from the horizontal, and at many places, not very distant, the rocks which are a thousand feet below Columbus can be seen exposed.

Beginning at Columbus, we have first the *Cliff Limestone*, which has a thickness of four hundred feet. It includes the *Devonian* and *Upper Silurian* formations of the geologists. Its whole depth is exposed in many places to the south-west, and is found to be composed of alternating layers of *grey limestone* and *marlite*. The strata of marlite are as impervious to water as the marl of Alabama, or the chalk of Paris. A portion of the limestone is somewhat cellular, mostly from the decomposition of fossils, but is not what could be considered *water-bearing*. The dip of this formation is toward Columbus, from the westward, at the rate of one or two feet to the mile, for a distance of sixty or seventy miles. Water penetrating the strata at that distant point, if it could pass on to Columbus, should have been found at the depth of about two hundred and fifty feet.* But the Artesian well shows that no such supplies are coming in from the west, thus proving that the *Cliff Limestone* has no *water-bearing* strata. All the water it affords, in general, must be from the passage of the rain into the decomposed loose surface deposits and through the fissures formed by the joints in the rocks.† The dip of the strata is eastward from Columbus, so that no water can come to her Artesian well from that direction.

* The strata at the anticlinal axis, where the dip eastward commences, are over a hundred feet below those at the surface in Columbus, and, sinking at the rate of two feet in a mile, will place them about two hundred and fifty feet below the surface at that city.

† It is of course understood by the reader, that all the water of our wells and springs, and all of it in the soils and rocks, is derived from the rains.

Immediately below the Cliff Limestone, we have the *Blue Limestone* formation. It belongs to the *Lower Silurian* formation of geologists. Its exact thickness is unknown in Ohio, Indiana or Kentucky, as the whole formation is not exposed at any one place within these States, nor are the lower strata brought up anywhere within them. In Pennsylvania, where the strata are thrown up at a high angle, its measurement has been effected, and it exhibits a thickness of six thousand feet; in Kentucky, as indicated at Frankfort, it must be at least one thousand four hundred feet thick; while, in some parts of Missouri, it has altogether disappeared, or has a thickness of only a few feet. The channel of the Ohio river, at Cincinnati, is six hundred feet below the base of the Cliff Limestone, and that of the Kentucky river at Frankfort exposes rocks six hundred feet below those of the river-bed at Cincinnati. This gives an exposure of about one thousand two hundred feet of the Blue Limestone for examination, leaving, it is supposed, about two hundred feet beneath, which can not be seen. It is estimated that its thickness must be greater at Columbus than at Cincinnati, as the former place is over a hundred miles nearer than the latter to its great development in Pennsylvania.

This formation is composed of alternate layers of *blue limestone* and *marlite*. The limestone is usually highly crystalline, and, like the marlite, is impervious to water. The marlite predominates in the upper half of the formation and the limestone in the lower. It includes no water-bearing strata; but at Frankfort, Ky., there is a portion of the formation, a little above the river bed, which is cavernous. The same character is presented in it at Tazewell, Tennessee.

Now, although these strata, as well as those of the Cliff Limestone, include none that are water-bearing, in the sense in which the term is employed when applied to Artesian wells, yet they retain sufficient water for the supply of springs and common wells; but in these cases the water is only found pervading the loose surface deposits, or running in veins in the open joints of the rocks, and not, as every one knows, in the body of the rocks themselves. The marlite, at depths where the frosts can not act upon it, is usually unbroken in its strata, and serves to conduct water along its upper surface, where porous materials allowing its passage exist. But, unlike deposits of sand, water can never flow along in the midst of a bed of compact marl or clay. The whole of the Cliff Limestone, and the Blue Limestone also, are, therefore, unsuitable formations in which to attempt the creation of Artesian wells.

But there is another point which should be noted; cavernous limestone, as well as that which has openings along the lines of its joints, often afford subterranean passages for streams of water. If the quantity in any instance be greater than can pass along the narrower parts of the channel, and the water be thus dammed back, and the source of supply be at a higher elevation than the surface above, an Artesian well can be supplied from it, and will secure the surplus which is held back for want of sufficient width in the passage below. The only difficulty will be in striking the vein of water, and to succeed in this, must be the result of accident and not of foresight in the operators.

Beneath the Blue Limestone, there exists a heavy formation of sandstone, very compact in its structure and not likely to have any reliable, water-bearing strata. It is known in the New York Geological Survey as the Potsdam sandstone. This formation is at the end of the chapter, as it rests upon the granite.

The facts now stated conduct us to the conclusion, that the geological formations existing beneath the Capitol of Ohio, are not of the same character as those of Alabama and Paris, and that the attempt to bore an Artesian well

in them is too hazardous to warrant the risk of the money necessary to make the experiment. In the present enterprise, as we see by an additional paragraph, one thousand seven hundred and fifty feet of rock have now been perforated without obtaining water. According to the foregoing estimates, if the Blue Limestone is no thicker at Columbus than at Cincinnati and Frankfort, another fifty feet will take them through to the sandstone. But should it be two or three hundred feet more, still it ought to be penetrated, now that they are so near being through the limestone, as the labor may possibly procure water,* and even if it should not, it will at least solve an important scientific question, that of the thickness of the Blue Limestone at that point.

The practical importance of this subject to the country at large, must serve as an apology for the fullness of the statements made in this article.

THE \$25,000 PRESIDENT.

To the Editor of the New York Tribune:

SIR.—As the late frequent comments of the Press on my salary as President of the New York and Erie Railroad Company, and on my administration of its affairs, will be read by persons to whom I am entirely unknown, justice to myself renders it necessary that I should make some reply.

The Presidency of the Company was tendered to me while in Europe, accompanied by the proposition to raise the salary to \$25,000. This offer, unexpected and unsolicited by me, was unconditionally refused. In answer to my refusal several Directors urged me to alter my determination, and the then President wrote to me, offering to resign in my favor. This induced me to return to this city with the view of aiding the Company by any means in my power, and after a short time to return to my family, whom I left in Europe. On my arrival here, I again refused to accept the Presidency, but the friends of the Company urged that this refusal, if persisted in, would render the bankruptcy of the Company inevitable, as many persons refused all assistance unless I accepted the Presidency. This induced me, reluctantly, to accept my present position. When the effects of the commercial crisis rendered it necessary to reduce the salaries of all the employees of the Company, to set the example of submission to this reduction, unsolicited by any of the directors, I ordered my salary to be reduced ten per cent., which reduction has been continued to the present time.

In my administration of the affairs of the Company, I have only had in view the best interests of the stockholders and creditors of the Company. Had I defended these interests less warmly, I should have avoided many unpleasant moments, and have made myself far more popular than I am. I have sought to introduce order, system and economy into every department, and to improve as rapidly as possible, the condition of the track and equipment. All the new Bonds negotiated thus far (\$3,000,000) have been sold at par, without even allowing a commission to agents or brokers. During the whole time I have held my present position, both myself and the house of Moran Brothers have kept aloof from all speculations or operations in either the shares or the Bonds of the Company. In regard to the late contest with competing roads, it was commenced with the full assent and approval of every director of the Company,

* They may not yet have passed through the cavernous portion of the formation, in which the best prospect for water exists.

and Samuel L. M. Barlow, Esq., the person chosen as the future umpire of the four great lines, after perusing the correspondence between this Company and its competitors, returned it with the following remarks:

"Nothing in it has gratified me more than the earnest effort which is apparent from the beginning on your part, to redeem the character of railroad management and put an end to the needless, expensive, and, in many respects, disgraceful system of competition which has produced the result which was apparent from the first, viz.: a total prostration of the entire railroad property of the country."

I have repeatedly pledged myself to the persons who have subscribed to the new loan of this Company, that I would not resign the Presidency as long as the Company remained embarrassed. But if the stockholders can find any one who, in their opinion, will better serve their interests, it will be no disappointment to me, if, at the coming election, they place such person in my present position.

CHARLES MORAN,

President N. Y. & E. R. R. Co.
New York, Oct. 4, 1858.

It is not probable that Mr. Moran will be able to quietly enjoy the \$25,000 salary received by him as President of the New York and Erie Railroad. In reply to his card, which we annex, a correspondent of the New York Tribune says:

Mr. Moran went to Europe ostensibly for the purpose of attending to the education of his children, but really for the purpose of negotiating the remaining four millions of the ten millions of Third Mortgage Bonds which were set apart for the payment of the Second Mortgage Bonds maturing March, 1859. Mr. Moran was then a Director in the Company, and had in his possession a resolution of the Board, giving him full control of said negotiations for a specified time, and for which he was to receive 2½ per cent. on \$100,000.

Mr. Moran says: "The Presidency of the Company was tendered to me while in Europe, accompanied by the proposition to raise the salary to \$25,000. The offer, unexpected and unsolicited by me, was unconditionally refused. In answer to my refusal, several directors urged me to alter my determination, and the then President wrote me, offering to resign in my favor. This induced me to return to the city."

Now the facts are, Mr. Moran having failed to negotiate the bonds, and having notified the Company to that effect, immediately thereupon, Mr. Theodore Moran, (brother of the President,) and another Director, without the consent or knowledge of the Board, took upon themselves the responsibility of inviting Mr. Moran to the Presidency, assuring him that he should receive as a salary \$25,000 or \$30,000 per annum. That Mr. Moran did receive a letter from "the then President," in which a proposition was made to resign in his favor, it is true; but it is equally true that Mr. Moran did not receive the same until after his arrival in this country, fully determined to take the Presidency. After Mr. Moran had returned here, the question of engaging his services was brought before the Board, and so far from their being unanimity of opinion on the subject, three days elapsed, and as many consecutive meetings, before his

MONEY OF THE ANCIENTS.

Before the invasion of Julius Cæsar, the natives of England had tin plates, iron plates, and rings, which were money, and their only money. On the authority of Seneca, a curious account is given of a period when leather, appropriately stamped to give it a certain legal character, was the only current money. At a comparatively recent date, in the annals of Europe, Fredrich the second, who died in 1250, at the siege of Milan, actually paid his troops with leather money. Nearly the same circumstance occurred in England during the great wars of the barons. In the course of 1350, King John, for the ransom of his royal person, promised to pay Edward the Third, of England, 3,000,000 of gold crowns. In order to fulfill the obligation, he was reduced to the mortifying necessity of paying the expenses of the palace in leather money, in the center of each piece there being a little, bright point of silver. In that reign is found the origin of the travestied honor of boyhood, called—conferring a leather medal. The imposing ceremonies accompanying a presentation, gave full force, dignity, and value to a leather jewel, which noblemen were probably proud and gratified to receive at the hand of majesty.

So late as 1574, there was an immense issue of money in Holland stamped on small sheets of paste-board. But further back in the vista of years, Numa Pompilius, the second king of Rome, who reigned 672 years before the Christian era, made money out of wood as well as leather; a knowledge of which might have influenced King John in the bold project of substituting the tanned hide of an animal for gold and silver, well known to his subjects to be exceedingly precious.

Both gold and silver appear to have been in extensive circulation in Egypt, soon after their potency was understood in Asia. From thence they were introduced into Carthage and Greece; and finally, traveling further and further in a westerly direction, the city of Rome discovered the importance of legalizing their circulation.

Weight having always been of the first importance in early times, the shape of money appears to have been regarded with perfect indifference for a series of years.

When the bits and portions of metal received as precious, were extensively circulated, it is quite probable that each possessor shaped them to suit his own conception, as practiced to some extent at this time in remote places in the East Indies. The payer away cuts off parts with shears, till he obtains, by exact weight, the stipulated amount. It was thus that men traveled with the evidence of their possessions in a sack. But great inconvenience must have resulted from this often tedious process; and as nations advanced in civilization and the economic arts, a certain mark or impression on certain sized pieces were acknowledged to be a sign of a certain weight. This facilitated negotiations, and afterwards led to further improvements, both in the shape, weight, and beauty of the external devices. By and by, the profile of the king, the date of the coinage, and the record of important events, gave still more completeness and character to the circulating article of exchange.

The September earnings of the Galena Road, it is now stated, will nearly reach those of September, 1857.

CINCINNATI, WILMINGTON & ZANESVILLE R. R.

A meeting of the bondholders of this road was held in New York on Saturday last. The Report of the Committee, consisting of Messrs. Theo. T. Moran, Isaac Iselin and Frederick A. Lane, sent out to examine the affairs of the Company, was submitted. They express their satisfaction of the administration of Mr. Gest, the Receiver. An adjourned meeting of the Bondholders is called for Wednesday next, at the office of Messrs. Clift & Lane, No. 44 Nassau street, when a new financial plan will be presented, the outline of which is as follows: A decree of foreclosure to be immediately entered into and held in abeyance until the stockholders shall have time to complete the road to the Hamilton and Dayton line, near Glendale, and in the mean time the road to pass into the hands of an Executive Committee, composed of Theodore T. Moran, Chauncey Brooks and Col. Bond. The first and second mortgage bond to be deferred fifteen years from maturity, and the over-due interest on each issue and that to fall due to May, 1860, inclusive, to be funded, payable in fifteen years, and to bear interest from that date (May, 1860,) at the rate of seven per cent. per annum, payable half-yearly on the usual days; new coupon sheets to be emitted for that purpose and for that time, which funded interest, as aforesaid, shall have the same legal priorities that each issue now carries.

IMPROVEMENT IN LOCOMOTIVE AXLES AND COUPLINGS.—At a late meeting of Manchester Institution of Mechanical Engineers, Mr. Fairbairn read a paper upon this subject. The improvements in question had for their object the introduction of an elastic cushion or spring of vulcanised India-rubber between the axle boxes and the framing of locomotive engines, to allow the wheels to accommodate themselves to curved portions of the railway, and thus to diminish the wear on the flanges of the wheels and on the faces of the axle boxes. A piece of the India-rubber which had been in use in the axles of an engine, while the engine had travelled 17,000 miles, was exhibited; and the chairman observed that it appeared to be the better for wear.

EDWARD J. MANSFIELD, C. E.

OFFERS his services on Railroads, Turnpikes, or Civil Construction. He has been employed for several years in Ohio, and Tennessee, as assistant Engineer.

Refer to—

E. D. Mansfield, } Cincinnati.
T. Wrightson, }
A. Kennedy, Iowa.
C. Davies. New York.

oct.7-4t.

RAILROAD IRON.
LOCOMOTIVES.

4,000 Tons rails, 58 to 61 lbs. per yard 200 tons
rails 49 lbs. per yard, 1,000 tons rails 55 lbs.
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Feb. 7. '56-2m.]

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July 14, 1857.

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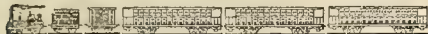
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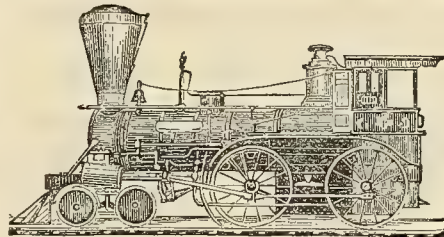
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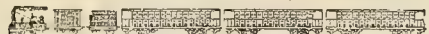
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4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

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7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

6.00 P. M. Train for Hamilton.

RETURNING TRAINS

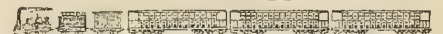
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Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

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ROBERT HARRIS, Supt.
Racine, May 15, 1857. my21

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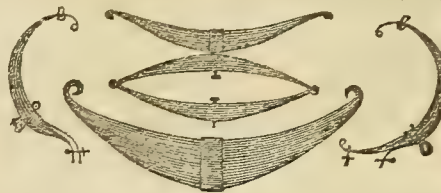
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Railroad Record.

E.D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....OCT. 21, 1858.

Railroad Record

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STEAM BOILERS EXPLOSIONS.

We hear nothing more about the experiments relative to the explosion of steam boilers from either Mr. Harshman or our friend Latta.

If there is any truth in Mr. Harshman's theory, it is of too much importance to the world to allow it to go by unheeded. Why can we not have the experiment? Can not Mr. Latta make some arrangements whereby the experiment can be conducted under the supervision of the Ohio Mechanics' Institute, and in the presence of some of our most able and scientific mechanics. Come, what say you, the experiment will not cost much.

STEAM AND THE STEAM ENGINE—STEAM-BOATS.

In our last we carried the history of the Steam Engine to the invention of *Boulton and Watt*. We may here leave the steam engine, although it has been greatly improved since, and proceed to examine, in brief, the invention of the *Steamboat*, about which there has been much dispute, and yet, upon which, the facts are all clear.

It is certain—for we have been the witnesses to the fact—that somewhere about 1787, *RUMSEY*, in Virginia, actually made a *steamboat*, and it actually moved *by steam* on the Potomac river. To this, there were too many witnesses to leave any doubt. Why, then, was not the steamboat introduced? Because, although he succeeded in making a boat to go by steam, he had *not* succeeded in making a practical, profitable machine. Nothing is more certain, than that the brightest invention which human genius ever conceived will prove a failure, if, in the common language of the world, it can not be made to *pay*. We know not the particular defect of Mr. Rumsey's boat; but, we believe, it was made to go by *oars*, which must always prove a failure with steam machinery. In addition to the steamboat, and in advance of locomotives, we have credible testimony, that Rumsey actually made a *steam carriage to go on land*; but, we have no evidence that it was ever set in motion. Of the history of Rumsey, we know little. It may be, and probably was, that he died in the midst of these inventions. At any rate, we think it established beyond a doubt, that Rumsey was the first man who ever made a boat go by steam.

The next conspicuous inventor, in this department of Mechanics, was *JOHN FITCH*, and we are strongly inclined to be of the opinion, the man of most comprehensive genius of those who are celebrated in this department; and yet, it has so happened, that Fitch did not put his mind on any practical, profitable, steam machine. In 1795, or thereabouts, Fitch constructed, and put in motion, a *steamboat* on the Delaware River. This boat actually moved at the rate of some four or five miles per hour. Had this boat been actually used on rivers, would it not have been deemed a useful and most profitable machine in locomotion? Unquestionably; but the machinery broke after going a few miles, and the attempt was not renewed. Several years after that, Fitch declared, to intelligent gentlemen, that in a short time the mountains would be traversed by steam machines, anticipating, so far as his own perceptions were concerned, the invention of locomotives.

We now come to *FULTON*. That Mr. Fulton deserved credit for his genius, as well as his practical talent, there can be no doubt. But, so far as *originating* the scheme of a

steamboat, we can allow him no such credit. He was clearly preceded in that, by both Rumsey and Fitch. The evidence, on that head, is complete. Is it possible, that Fulton had not heard, or known of the plans of Rumsey and Fitch? It is certainly not probable; nor do we know that he ever pretended to such ignorance. On the contrary, it was their attempts, probably, which stimulated his own mind. After the partial success of Rumsey and Fitch, the practical question was not to make a steamboat, but to make one which would not encounter the difficulties which had attended the previous plans. This, Mr. Fulton accomplished, chiefly by the paddle wheel. In 1807, his boat was put in motion, at New York, in the sight of incredulous, but admiring thousands. Two years after that, we (when very small,) were taken on board the *Paragon*, which was supposed to excel any thing that was or could be made. In size, model, appearance, it was exceedingly unlike any thing we have now. It was a small boat, built low, and narrow. Its cabin was all below, with windows just above the water. It moved, probably, at the rate of about seven miles an hour. For many years after that, (at least ten years,) no considerable improvement was made in the steamboat. From Albany to New York is about 145 miles, and the boats used to make the distance in from sixteen to twenty-four hours, according to the wind and tide. On smooth water they seldom made more than eight miles an hour. It was not till 1811, that steamboats were introduced on the Ohio; and not till about 1820, that any great improvements were made in the models and engines of boats, on the Hudson. After that the improvement was so rapid, that boats now run on that river, at about sixteen miles per hour, and with the tide, sometimes much faster.

In connection with this subject, we may say that the *economy* of the steam engine is much its most important feature. Without this, a steam engine would be merely a curious result of human genius; like a thousand other inventions in the Patent Offices, it would remain a monument to ingenuity, but a failure in practice. Fulton deserves the credit, not so much of genius, as being a sagacious, practical, faithful mechanic.

The economy of the steamboat may be illustrated thus: The old stages could not go, profitably, for less than six cents per mile, or \$9 00 from Albany to New York. Under the Fulton and Livingstone monopoly, which was maintained by the courts of New York, the fare on the North River boats, was, for many years, about \$7 00 per passage; which, of course, was sufficient to keep down the stages; but, when the monopoly was broken up, the price of steamboat passage gradually came down to \$2 00, and now, exclusive of meals, is about \$1 00! But, let

us suppose it to be \$2 00, and make a comparison with 1,000 passengers :

1,000 passengers at \$9 00, under stage.....	\$9,000
Steamboat Monopoly, at \$7 00.....	7,000
Steamboats, free competition.....	2,000

We thus see, that with free competition, steam saves \$7,000 on the transportation of 1,000 passengers from Albany to New York, which is near eighty per cent. of the old cost !

This same economy runs into all business carried on by steam, so that the resulting profit to the nation amounts to tens of millions !

THE CROPS OF 1858.

A great many persons are, and will be, disappointed about this year's crops. For a long time, the writers for newspapers represented the crops of this season as good. But the month of August had not arrived before all this was proved to be fallacious. The grass crop is probably the only one which was really good ; and that was not extraordinary.

Fortunately, to prevent distress, there was a large surplus of the old crops, and it is this which has been going to market, and preventing the rapid rise of prices. The effect of a falling off in one season is never felt till the following year. It will not be felt till next March, how great the falling off in the wheat crop was. The deficiencies in oats and corn will be felt this winter very much. It may not be as hard a winter as it was two years since, but the prices of feed for cattle and horses must rule high.

We estimate the loss of crops, in the Northwest, including Iowa and Minnesota, to be as follows :

Average crop of Wheat for 1858, at 15 bushels per acre.....	64,000,000 bushels.
Actual production, at 10 bushels per acre.....	42,166,000 "
Loss.....	21,334,000 "
Average crop of Indian Corn, at 33 bushels.....	210,000,000 bushels.
Actual crop at two-thirds.....	140,000,000 "
Deficiency.....	70,000,000 "
Average crop of Oats, in 1858.....	80,000,000 bushels.
Actual crop at one-half.....	40,000,000 "
Deficiency.....	40,000,000 "

Now, if we are at all accurate in this, there is an actual deficiency, in regard to what, should be an average crop in 1858, of one hundred and thirty millions of bushels ; which is about 35 per cent. on an ordinary crop. Of this, twenty millions of bushels come from the food of man, and one hundred and ten from that of animals, and whisky. The latter article we can very well do without. But, not so with the food of animals. In addition to this may be noticed a deficiency in potatoes, and an almost total failure of fruit. Both of these are of more consequence than is generally considered.

Now, opposed to these facts are these :

1. That there is, or has been, a large surplus from last year, on hand.

2. That the crops of other States appear to be nearly or quite an average.

3. The crops of Europe appear to be good ; and, hence, there will be no great demand there.

We grant that these will counterbalance the other, provided there is no falling off next year. But, should the spring crops prove bad, there must be scarce times in the West. As it is, the supply of flour and corn in the markets of the West will be moderate during the winter. But, in food for animals, there will obviously be a deficiency, and notwithstanding the price of cattle is comparatively low now, we look for a rise in cattle, and all other animals before spring.

The present aspect of autumnal weather leads us to expect a return of regular seasons ; and without an extraordinary interposition of Providence, we shall expect full crops in the next season.

SOUTHERN PACIFIC RAILROAD.

The following sentiments from the Marshall Republican we think will meet with general approval. The road is certainly what the people want, and a speedy adjustment of the difficulties between the two companies, is probably necessary to secure its construction with the greatest dispatch. As a general rule we have always found that law suits, instead of affording a remedy for grievances, only make bad worse.—*Galveston News.*

"We have had the pleasure of perusing several letters from gentlemen of high respectability, written from Louisville Ky., all of them affirming that the stockholders abroad have sustained Dr. Fowlkes with great unanimity, in his efforts to maintain their rights in Texas, and that the assessment of fifty cents advance on each share will be promptly met. The Kentucky stockholders are going beyond this, and are paying up their full assessments for July, and in advance for January. It is confidently stated that enough will be raised to pay off all the indebtedness of the Company at once, and to leave a surplus to prosecute the work."

Mr. Burkhardt, the Receiving Agent of the Company at Louisville, Kentucky, was in our city last week, and remarked that he was sending forward large sums of money, and that money enough would be raised to entirely free the Company from its embarrassments. Push on the column, and let us have the road made at the earliest possible day. It is a disgrace to the intelligence and enterprise of our country that the road is not already completed.

LEXINGTON AND FRANKFORT RAILROAD.—The Directory of the Lexington and Frankfort Railroad Company have declared a dividend of twenty per cent. on the present stock, payable in the stock of the Company. The treasurer was directed not to pay any dividend in cash to the holder of any fractional share, until the fraction shall have been extinguished, and he was authorised to buy or sell fractional shares at 70 cents on the dollar.

CINCINNATI, HAMILTON AND DAYTON R. R.

The regular semi-annual meeting of the Stockholders of the Cincinnati, Hamilton and Dayton Railroad Company was held at the office of the corporation in this city, Monday afternoon. An organization was effected by the election of Wm. Greene, Esq., as Chairman, and John K. Green, Esq., Secretary. The reports of the several officers, and also of the Stockholders' Committee, were presented and ordered to be printed :

PRESIDENT'S REPORT.

OFFICE CIN., HAM. & DAYTON R. R. Co.
CINCINNATI, Oct. 18, 1858. }

To the Stockholders :

GENTLEMEN.—The Board of Directors submit the annex tables, furnished by their Secretary, showing the present financial condition and the receipts and expenditures of the Company for the six months ending on the 30th ult :

A comparison of the gross earnings with those of the corresponding six months of last year, will show a decrease of \$38,214 16. It will show that the expenditures, including that which was last year charged to Renewal Accounts have been reduced \$35,697 16, making the net earnings from transportation less by \$2,517, in the six months.

The expenses would have been still further reduced had it not become necessary during the past six months, in consequence of the extraordinary flood in June, to add additional protection to our embankments and bridges.

There has been no charge made to Construction Account during the past six months, although some new work has been done, furnishing greater facilities for business. This, together with the re-rolling of iron, heretofore charged to Renewal Account, is embraced in the working expenses, as stated by the Secretary.

The reduction in gross earnings are attributable mainly to the low rates, at which we have been compelled, through the action of other companies, to carry freights during the past few months ; and also to the fact that in September, 1857, our earnings were increased \$11,000 by the State Fair.

The net earnings of the past six months have been applied toward the discharge of the floating debt of the Company. The balance of this debt will be paid within a few months.

The assets of the Company at this time exceeds its liabilities ; but a portion of these assets are not available for twelve months, whilst the liabilities have to be met from month to month.

The Board of Directors, acting in accordance with their own judgment, as well as under instructions from the Stockholders, have deemed it their duty to pass the October dividend.

Respectfully submitted,

S. S. L'HOMMEDIEU, Pres't.

SECRETARY'S REPORT.

OFFICE CIN., HAM. & DAYTON R. R. Co.
CINCINNATI, Oct. 11, 1858. }

To S. S. L'Homedieu, President :

DEAR SIR:—Herewith find statement of the earnings and expenses of the road for the six months ending on the 30th ult., and a comparative statement with the corresponding

six months of last year. Also, an account of the assets and liabilities of the Company.

Respectfully yours,
F. H. SHORT, *Secretary*.

EARNINGS.

From Passengers.....	\$114,042 71
" Freight.....	102,433 36
" Mails and Express.....	8,293 59
Total.....	\$224,371 66

EXPENSES.

For transportation, renewal of iron, protection of embankments, bridges, etc.....	\$109,485 48
	\$114,886 18

APPLIED AS FOLLOWS.

Interest on Bonds.....	\$49,985 00
Interest Account.....	272 59
Bills Payable.....	56,678 07
Sinking Fund.....	2,600 00
Real Estate.....	1,341 92
Current accounts.....	4,008 60
	\$114,886 18

Comparison of receipts and expenses for six months, ending Sept. 30, 1858, with the same time in 1857:

RECEIPTS.

	1857.	1858.	Decrease.
From Passengers...	\$139,979 58	\$114,042 71	\$25,936 87
" Freight.....	112,575 63	102,433 36	10,540 27
" Mails & Ex.....	10,030 01	8,293 59	1,737 02
	\$362,585 62	\$224,371 66	\$38,214 16

EXPENSES.

	1857.	1858.	Decrease.
Trans., renewals, etc	\$145,182 64	\$109,485 48	\$35,697 16
Interest account....	9,281 53	272 59	9,008 94
Int. on Bonds.....	50,312 89	49,985 00	327 86
	\$304,777 06	\$159,743 07	\$45,033 99
Decrease in Receipts.....			\$38,214 16
" " Expenses including interest.....			45,033 99
			\$ 6,819 63

LIABILITIES.

Bills Payable.....	\$34,287 15
Interest on Bonds.....	31,570 00
Unpaid Dividend.....	3,036 95
Due Railroad Companies.....	37,404 17
Due Individuals.....	8,570 31
Pay Roll, September.....	11,712 81
	\$126,581 39

ASSETS.

Bills Receivable.....	\$61,735 52
Due from Railroad Companies.....	21,605 34
Due from Individuals.....	5,243 54
Due from P. O. Department.....	1,878 00
Cash and Cash Items.....	54,023 58
	\$144,482 98
	126,581 39

Assets over Liabilities.....\$ 17,901 59

COMMITTEE'S REPORT.

At the Annual Meeting of the Stockholders of the Cincinnati, Hamilton & Dayton Railroad Company, held on the 4th day of May last, the following resolution, adopted in accordance with the recommendation of the investigating committee, at a meeting held on the 18th of March:

"Resolved, That a Committee of three stockholders, (not at this time Directors,) be appointed to examine into the finances and general affairs of the Company, and report at the meeting to be held on the second Monday in October next; and that said Committee have access, at all times, to the books of the Company."

Your Committee have performed the duty assigned them, and beg leave to report:

During the interregnum they have occasion-

* The ownership of a portion of the Second Mortgage Bonds, sold by the Company, is in dispute, and the Company have been served with notice not to pay the interest, which accounts for this sum not being paid.

ally visited the Company's office, examined the books, inquired into the condition of its affairs, and the progress and character of its current business. They have employed a competent person, Mr. Lysle, not otherwise in the service of the Company, to make out weekly statements. These are not taken from balance sheets furnished by the Secretary, but are abstracts from the books, as they stand, at such times as the balances are taken. Under this arrangement it would seem almost impossible that any errors should creep in.

Herewith will be found a tabular statement of the condition of the Company's affairs; also of the monthly receipts for the last six months, commencing when the report of a former committee ended. These are contrasted with the corresponding months of 1857. The exhibit also shows the net earnings, during this time, and the manner in which they have been appropriated.

It will be seen that the receipts, for the last six months, have not equalled those of the corresponding six months of last year. This difference has arisen partly from the stagnation of business, but mainly from the very reduced price at which freight has been transported. On inquiry, it has been found this road is not justly chargeable with this loss; or, rather, with this want of profit in its operations.

The running connections with other roads, and the necessity as well as policy of preserving its share of business with competing lines, made this result inevitable at a time when strife and competition prevailed, as they did during several months past between the leading roads of the country. It is hoped this ill-advised policy is at an end; and that hereafter remunerative prices may be obtained for services rendered. Had such have been the case during the past summer, it is believed the income of the road would have equalled the expectations of its friends.

Since the report of the last committee, some progress has been made in favorable running connections with other roads. The controversy with the Sandusky, Dayton and Cincinnati (formerly Lake Erie & Mad River Road) has been amicably settled, and the business relations are now of a mutually beneficial character. The short route through Delaware to Cleveland, has been opened, and trains now run through on this line daily. It will take some time to attract the public attention again to this route, which was lost by the interruption last year; but its directness and pleasantness can not fail ultimately to draw upon it a full share of travel and traffic. The finishing of the Junction road is in progress. Rails are being laid at this end connecting with the Cincinnati, Hamilton and Dayton road, and hopes are entertained that trains will be run, as far as Connorsville, within the next few months. The Pittsburg, Fort Wayne and Chicago road will be completed by the middle of November. When this is done, the Dayton and Michigan Road, via Lima, will furnish, in connection with our road, a line from Cincinnati to Chicago of uniform gauge, only about eight miles longer than the shortest line now in use. Passenger and freight cars will then run through without change, and it will doubtless command a full share of business.

It is understood some further running arrangements and connections are in progress, which, if perfected, will operate beneficially. Too many roads have been constructed; more than the business wants of the country actually require, and it is apparent to railroad

men that harmony and good feeling must prevail to guarantee success. Your Committee are satisfied that no effort will be wanting on the part of the members of the Board of Directors of this Company, to accomplish their purpose.

Your Committee take pleasure in being able to state they can see no good reason to doubt but that the C. H. & D. R. R. Co. will soon be out of debt, except for its bonds, and will then pay regular, moderate dividends. When the time for commencing this will arrive, your Committee will not pretend to state; but they strenuously recommend that no attempt at that shall be made until the debts of the Company are fully paid, with the exception above named, and a clear surplus of means for such purpose exists.

Your Committee have passed over the entire line of the road, in a special train, and have examined it carefully. It is in good repair and every thing seems permanent and in order.

Your Committee cheerfully bear testimony to the fidelity and industry of the officers and employees of the Company so far as they have been able to discover. The business is done with a system, and the books kept in a manner which would not be easy to improve upon.

All of which is respectfully submitted.

JOHN YOUNG,
W. W. GOODMAN,
JOHN W. HARTWELL, } Committee.

SOUTH WESTERN RAILROAD COMPANY.

The President in his report to this Company says:

"Your road was chartered in 1852, and the original time to begin the construction of your road was five years. The general improvement act gives the magnificent State aid of \$10,000 a mile to this Company; and another act gives \$200,000 in State bonds for the three most important bridges on the road. Subsequent amendments brought the time to the 8th of February, 1860, to come within the requirements of the charter; and the Legislature at their last session, passed an act amending the charter of your Company, allowing the State aid of \$10,000 a mile in State bonds, to be applied to the first and every subsequent fifteen graded miles of your road. The time to come within the requirements of the charter, and the provisions of the general improvement act and its amendments, has also been extended by the last Legislature, to the 8th of February, 1862. A very important act was also passed by the last Legislature, allowing the railroad companies in the State to use the surplus of the State aid for construction, etc., after the necessary superstructure and equipment had been provided; and another act also allows railroad companies in this State to use the tubular T rail on their road, instead of the common T or U rail, whenever said tubular T rail will have been approved by the Road Commissioner of the State.

Thus you will perceive, that the State has acted in the most liberal manner, and has given the greatest possible inducements to

the people of this mountain country to build a railroad. But I am sorry to say, that the people seem to believe that they have done too much already, and some, no doubt, think that the State ought to build the entire road for them.

The right of way, which has been obtained on the line from McMinnville to Sparta, has cost the Company so far nothing, as all the land-holders have freely made a gift of their land for railroad purposes.

The work on your road, which has mainly been done on the first fifteen miles, in the county of Warren, although it has progressed in a very slow manner on account of the unfavorable financial condition of your Company, has never been entirely suspended. From the report of the Engineer, you will find that work has been done upon the road to the amount of \$27,627 in cash, and \$3,475 in stock; and the whole amount spent since the beginning of operations in the spring of 1857, for grading, engineering and contingencies, amounts to \$32,170 in cash, and \$3,475 in stock.

I am sorry not to be able to report more progress and more work done, but considering the confusion and tightness of financial matters, which has considerably injured all business transactions in this country, and also considering the want of popularity, under which this enterprise has so far labored, I may say, that our progress has been more favorable than could have been expected. The Board of Directors has always pursued a progressive course, and has called every month upon the stockholders for installments upon the stock. I am sorry to say that these calls have not been promptly answered, and not as promptly as it was in the power of the stockholders to do, even after considering all the depression in money matters. The report of the Treasurer will inform you in regard to the income and the expenses, and will show how much there is yet due upon the calls made.

The only source upon which the Company could place any dependence, was the railroad tax of the county of White. This county has so far nobly done its duty, and has done all we expected it to do. It is useless for me to comment upon the present financial condition of the Company, which is very unfavorable.

The figures of the Secretary's and the Treasurer's reports speak for themselves. I can only again appeal to the stockholders to do their duty, and to say to them, that the work will have to be stopped, unless the stock is paid in faster.

Several attempts have been made to induce the counties of Warren and Coffee to vote a stock subscription to the capital stock of this Company.

The counties of Warren and Coffee have been partly canvassed upon that question, but the vote has been from time to time postponed,

as the day, for the vote to be taken, had not been regularly advertised in all the different districts of these counties, and as I had, also, on account of the want of aid from the friends of the enterprise, not been able to canvass the counties thoroughly, and to bring the subject fairly before the people. The vote upon the subject of subscribing \$40,000 in Warren county, and \$20,000 in Coffee county, to the capital stock of your Company, will finally be taken in both counties on the 25th of September next; and if the subject should be thoroughly explained to the people, and these counties thoroughly canvassed, there is little doubt in my mind that they would vote such a tax, which is in fact a very small matter for such wealthy counties. In case these two counties should vote this amount of \$60,000, the amount yet to be raised to grade and to prepare for superstructure the first sixty miles of your road is, according to the report of the Chief Engineer, \$214,000. This amount is necessary to be subscribed before your Company can obtain the State aid on the first fifteen miles, after the completion of the grading on that length of the road. There is no doubt about it, that if the people would take the matter in hand, and subscribe according to their means, that such a sum could easily be raised in the counties along the line of the road.

It is unnecessary for us to look abroad for aid to build this railroad, before we have exhausted all our efforts to raise this sum at home, and the company can not expect others to build their railroad for them, before they have built a large portion of it themselves.

The country is now recovering from great financial troubles, and better times seem to be in store for us; there never was, therefore, a better time to start this great project; but it takes the united effort of all the friends of this enterprise to secure the same.

The great natural advantages of this road, it being a link in the great north and south line, connecting Cincinnati directly with the south, has been so often and so ably discussed, that it is quite unnecessary for me to say anything more upon the subject. But I can not refrain from expressing my astonishment at the indifference and apathy, and even the opposition, which is manifested in regard to this great project, in regard to a railroad which has as great natural advantages as any road in the State, which has received a more favorable charter from the Legislature, and has been dealt with in a more lenient manner by that body, than any other railroad in the State, and which is to be the *only possible way* by which the people of this mountain district can ever get a good market; can ever have the same advantages which the people of every other portion of the State now have, and can ever be saved from an unfavorable and unfortunate position they are now laboring under, being now, we may nearly say,

entirely cut off from the balance of the world.

The advantages of such an important railroad line are so great, that the people ought not to need any more inducements to subscribe the balance of the stock needed.

TREASURER'S REPORT.

AMOUNT RECEIVED.

In cash from stockholders.....\$19,643 81

AMOUNT PAID.

On account of grading.....	\$17,217 82
“ “ engineering and contingencies	781 00
“ “ printing.....	98 21
“ “ office expenses.....	4 85
“ “ officers of Company.....	257 10
“ “ collecting agents.....	73 00
“ “ discounts and interests.....	1,109 50
“ “ bills payable.....	56 87
Balance on hand.....	15 46

DIRECTORS.

Thomas Maybry, P. H. Marbury, H. H. Harrison, B. J. Hill, S. B. Spurlock, G. M. Smartt, Washington Britton, John Smith, Esq., Wm. Bosson, J. C. Officer, W. P. Goodbar, J. W. Simpson, H. Denton, P. M. Armstrong, A. Cullom.

OFFICERS.

P. H. Marbury, *President*. B. F. Paine, *Secretary*. S. B. Spurlock, *Treasurer*. E. F. Falconnet, *Chief Engineer*.

ON LIGHTING RAILWAY TRAINS WITH GAS.

BY MR. KITSON.

The lighting of railway trains has received comparatively little attention during the progress and improvements of the railway system, the oil lamp having undergone but few improvements, though its defects have been generally felt. Gas possesses important advantages over all the oil lamp arrangements yet produced, in the constant brilliancy of the light, requiring only two lights for each carriage—the saving that may be effected by turning off lights from all unoccupied carriages—the brilliant light thereby obtained for the tail and side lights of the train—and the saving in expense.

The first use of gas, to the writer's knowledge, for lighting railway trains, was in the United States, where an arrangement, which seemed to answer, was tried during 1856, upon the Galena & Chicago Railroad. Upon the floor of each car is placed a gas holder, consisting of two tubes, each divided into two compartments by a longitudinal diaphragm of India-rubber. Gas is admitted to the tube on one side of the diaphragm from the gas main at the station, thereby pressing the diaphragm against the side of the tube; and the gas is then forced out to the burners by means of a dry metre or small pump, placed on the car, which pumps in air on the other side of the diaphragm, pressing it back against the opposite side of the tube, and thus forcing out the gas. This arrangement has many advantages for an American railroad, where a railroad car is so much longer than an English carriage, one car accommodating about seventy passengers; and the number of cars, therefore, required to form a train sufficient to carry 200 passengers amounting to only 3, whereas upon an English line it would require eleven carriages to accommodate the same number of passengers.

The advantage of the American system of railroads for adopting a gas-holder to each

car independently, is very great; each car being carried upon two trucks, which have their bearings close to the end of the car, thereby leaving a large unoccupied space, twenty or thirty feet long, which is well adapted for a gas-holder sufficient to supply six lights for twelve hours.

The success of these experiments induced Mr. T. J. Thompson to produce an arrangement for the use of gas lights suitable for English railway trains. From the difference between the two systems of working, an arrangement that would answer upon an American railroad would be inapplicable in this country; to have the gas-holder above described under every carriage, where a company may have 400 or 500 carriages, would involve an expenditure which could scarcely be repaid by any result; whilst the great difficulty of keeping such a stock of gas-holders in perfect repair, and the annoyance arising from the slightest defect, would prove a constant source of complaint from travelers.

To produce an arrangement suitable for an English railway, two requisites have to be obtained: first, a gas-holder suitable to supply a train of carriages, and formed of a material not perishable; and, secondly, a perfect form of coupling, with which the escape of gas, by neglect or carelessness in putting together a train of carriages, is impossible.

A gas-holder, forming a separate piece of rolling stock by itself, would not be practicable, excepting in cases of very long trains, since the expense of haulage would, to a great extent, counteract the advantage gained by adopting gas in place of oil; and it is therefore necessary that it should form part of the tender or luggage van or be combined with some other portion of the existing rolling stock. A rectangular gas-holder upon the ordinary stationary principle, ten feet long, seven feet wide, and three feet six inches deep, would require a mass of water weighing about 6½ tons, a dead weight which would be inadmissible for running over a line; and the motion of such a quantity of water would render it difficult to get a gas-holder to work properly; while the balancing of the gas-holder by weights would also be a complicated arrangement.

These objections have been overcome by the use of a simple form of gas-holder, which can be adapted to the tender or the luggage van, or can be combined with any of the carriages.

A rectangular tank is constructed, having only an aperture 12 inches diameter in the bottom, where a pipe for filling it with water enters, being brought up for that purpose at the back of the tender; the air escaping through a small pipe while the tank is being filled. The feed-valves are placed at the bottom of the tank; the rods which work them passing through stuffing-boxes, to prevent any leakage of water. Round the four sides of the tank is an outside sheeting, 1¼ inches from the sides of the tank, formed of thin wrought iron plates, about No. 16 wire gauge thickness which is fastened round the bottom of the tank to a wrought iron frame. This gives a space round the tank, 1¼ inches in breadth—the depth of the tank—which forms the water space for the gas-holder to work in; the roof of the gas-holder, when empty, being one inch above the roof of the tank. The outside sheeting and the sides of the gas-holder are carried up twelve inches higher than the roof of the tank, so as to allow for variation in pressure of the gas. At

the four corners of the tank are placed guide-rods, which are fastened into the bottom frame, and stayed at the top by light wrought iron stays, riveted to the top of the outside sheeting. These guide rods are placed in the water space, and brass roller guides are fixed at the top and bottom of each corner of the gas-holder, which work upon the guide-rod. Round the bottom of the gas-holder T iron or angle iron is riveted, to prevent the springing of the plates under the pressure; and at distance of four or five feet small rollers are placed, so that, should the pressure be sufficient to spring the sides of the gas-holder, these rollers would come in contact with the outside plates, and prevent the gas-holder from catching in any way upon the plates or rivets. In the water-spaces round the gas-holder and over the top of the tank strips of light angle iron are placed, to act as breakwaters, and prevent any oscillating motion being imparted to the water; and a strip of strong leather is fastened round the top of the outside sheeting, against which the sides of the gas-holder work, for the purpose of preventing any pieces of coke from getting into the water space. Through the center of the water tank passes a gas-pipe, which extends twelve inches above the top of the tank, so as to prevent any water getting into it; and upon the gas-holder is a small dome, fitting over the pipe. This central pipe branches off below the tank to each side of the tender, where a coupling or union joint is fastened on the ends, for the purpose of coupling on to the pipe of the stationary gasometer. A small gas-pipe branches off from the central pipe to the coupling apparatus at the back of the tender, and so on for the supply of gas to the carriages.

A gas-holder, such as above described, 10 feet long, 7 feet wide, and 3 feet 6 inches deep, will contain 216 cubic feet of gas, allowing the bottom of the gas-holder to be 5 inches below the level of the water when full of gas, which is a necessary allowance for motion of the water or the difference of level of the two ends caused by steep gradients. The consumption of an average-sized burner being 3 cubic feet per hour, a train of 12 carriages, burning 2 lights each, gives 24 lights, consuming 3 cubic feet per hour each, or 72 cubic feet total,—making a consumption of 216 cubic feet in three hours; so that this gas-holder will supply 12 carriages for 3 hours. The process of filling the gas-holder is simple:—At the principal stations along the line, at distances of from 50 to 100 miles, as circumstances may admit, there are small supply gasometers, from 8 to 12 feet diameter, which work at a pressure of from 12 to 24 inches of water: when a tender gas-holder requires filling, a branch of the central pipe is coupled by means of a union joint to supply the gasometer; and the pressure, being from eight to twenty inches greater in the gasometer than in the tender gas-holder, raises the latter, and fills it in from one to two minutes. As it was anticipated that the motion of the train would have the effect of giving the gas-holder a jumping motion between its guides, owing to the elastic character of the gas, it was thought necessary to guard against this by inserting a rack in each guide-rod, and fixing a spring catch upon the top corners of the gas-holder, which, after catching the teeth of the rack, prevented the gas-holder from rising. However, in making the practical experiments with the gas-holder, this provision proved to be useless, the gas-holder working comparatively steadily, and

having no tendency to rise more than one-eighth of an inch. The result of this slight motion upon the flame was evident, in some instances drawing the gas back from the burner, and, consequently, extinguishing the light. These shocks, which are instantaneous, are now remedied by the simple arrangement of placing a small back flap-valve at the junction of the leading-off pipe with the gas-holder, which valve remains open so long as the gas enters the pipe from the gas-holder, but closes whenever the gas-holder has a tendency to draw the gas back from the pipe. The working of the valves has but a very slight effect upon the pressure in the pipes, the action being so rapid; and the effect upon the flame could not be detected when this plan was adopted. There is an advantage in adapting the gas-holder to the guard's van at the present time, even supposing the interior could not be made available for luggage, from the impracticability of altering the tenders made upon the present system, and from the guard's van, for a passenger train, not being in many instances of sufficient weight in itself as a break van, and requiring the addition of a considerable weight of iron to make an efficient break; in place of which dead weight the gas-holder will give all this advantage, the weight of a gas-holder, 10 feet long, being about 1½ tons, including the water requisite for its working. Also, when running at the end of the train, the tail light, which is the most important, will be upon the same carriage as the gas-holder, and supplied by an independent pipe, which will preclude the possibility of its getting out of order.

The satisfactory working of the above arrangement of gas-holder has been practically ascertained by trial upon different lines, where it has been severely tested by being placed upon uneasy working trucks, which were found to have no effect upon its action.

A supply gasometer, of simple construction and small expense, was then required for charging the train gas-holders. For this purpose there was provided a small circular gasometer, 12 feet diameter and 8 feet high, containing about 900 cubic feet of gas, sufficient to supply two or three train gas-holders without being filled from the gas works. It was balanced with weights running over pulleys in the ordinary manner. As the pressure requisite for filling the train gas-holders is from 12 to 24 inches of water, and the ordinary pressure at gas works only from two to three inches, the extra pressure in the gasometer was obtained by water on the roof. In order to fill the gasometer with gas, the water is all run off the roof by opening a cock, and the gasometer, being balanced by weights, rises with the gas works' pressure, the gas being admitted by a central pipe, through a self-acting gas valve. As the gasometer rises, the lever of the water-discharge-cock, which shuts the cock; and the gasometer rising to the top of the guides, a projection in the gasometer comes in contact with a balance lever, which opens a water valve, and lets water on to the roof of the gasometer through a vertical pipe. When sufficient water has been let on the roof to give the required pressure, the gas is compressed by the gasometer falling a certain distance, and a second projection, depressing the balance lever, shuts the water valve; the gasometer is then ready to supply the train gas-holders with gas.

The self-acting gas valve used, rises and falls with the slightest difference of pressure between the gas in the gasometer and that in the gas works' pipe. The seating of the valve is formed of two circular ribs cast round the entrance orifice for the gas, and forming an annular cup to receive mercury $\frac{3}{4}$ inch in depth. The outer rib is carried up, to serve as a guide for the valve to work in. The valve is formed of thin sheet iron, and is balanced by a weight at the opposite end of the beam which carries it. When the pressure is equal above and below the valve, it merely touches the surface of the mercury; but when the water is let on to the top of the gasometer, the pressure in the gasometer sinks the valve, and causes the mercury to rise according to the pressure. This form of valve is self-acting in every respect, and must be perfectly tight, no leakage being possible; the only communication being through the mercury, when the valve is down.

The coupling between the carriages is effected by vulcanized India rubber tubing, with a cut-off apparatus fastened upon each end of every carriage. It consists of a short cut-off pipe, working upon a stopper, similar to an ordinary cock; the India rubber tube is attached to the pipe by a union joint. When the cut-off pipe is down against the side of the carriage, the hole in the pipe coincides with that in the stopper, leaving a clear passage for the gas; in this position, the cut-off pipe is held by a spring, which clasps it close above the union joint; and the joint is protected and closed in by two projecting wings. In coupling the carriages, before disengaging them, the porter pulls the India rubber tube, and thereby brings the cut-off pipe into a raised position, when the gas is cut off, and the pipe is held up by the spring catch, which prevents it from falling back, enabling the porter to unscrew the union joint. The India rubber tube is attached to the carriage by a chain, and, when disconnected, is hung upon a hook on the carriage; a tube is provided at each end of every carriage. In coupling together the carriages, after the carriage coupling has been screwed up, the India rubber tube is attached to the cut-off pipe, by the union joint, which requires three turns, and the pipe is then released from the spring-catch, and pushed down to position, thus turning on the gas to the carriage. The whole time taken up in either case should not exceed a quarter of a minute. In the event of one carriage becoming accidentally detached from the next, in consequence of breakage of the carriage coupling or otherwise, the strain thrown upon the India rubber tube will pull the cut-off pipe into the horizontal position, before the tube breaks, thereby cutting off the gas; and this coupling accordingly prevents any possibility of a carriage being detached from a train without cutting off the communication with the gas holder.

The pipe supplying the burners in each carriage may run under the floor, or along the roof, as is most convenient. When the carriage is detached from the gas-holder, as in shunting at junctions, the lights in the carriage are prevented from going out by means of a small India rubber supply bag, about the size of an ordinary air pillow, which is placed under one of the seats of the carriage, and connected to the gas-pipe supplying the burners. When the pressure of gas in the pipe is reduced to one inch water, the supply bag begins to collapse, supplying the burners until the carriage is again attached to a train; the bag, containing about one cubic foot of

gas, would be sufficient to keep the two burners in each carriage supplied for about half an hour.

The comparative cost of gas and oil for lighting railway trains remains now to be considered.

The actual cost of lighting a train of 12 carriages with oil lamps, while running 100 miles, amounts to about 9s. 6d., or 1.14d. per train per mile. With carriages burning gas, having two lights each, each burner consuming 4 cubic ft. of gas per hour, assuming four hours as the time taken in running 100 miles, the amount consumed in running 100 miles would be 384 cubic feet; and allowing 5 cubic feet per hour for the tail lamp, and 4 cubic feet per hour for each of the two side lights—making 52 cubic feet in four hours—the total consumption would be 436 cubic feet for a train of 12 carriages running 100 miles. Taking the cost of gas at 4s. per thousand cubic feet, which is the average cost throughout England, the total cost will amount to 1s. 9d. in running 100 miles, or 0.21d. per train per mile, as compared with 1.14d. per train per mile, the cost of oil lamps.

If a train of 12 carriages, burning gas, runs one hundred miles per day on an average throughout the year, the cost of gas at the end of the year would be £31 18s. 9d., allowing four cubic feet of gas per hour to be consumed by each burner, which is 25 per cent. more than should be burned, thus allowing for loss and waste. For the same train burning oil, and running on an average 100 miles per day throughout the year as before, the sum would amount, at the end of the year, to £173 7s. 6d.—showing a saving in expense during the year, for a train of 12 carriages, of £141 8s. 9d. If a railway company run ten trains, of 12 carriages each, 100 miles per day, on an average throughout the year, the cost of lighting would amount to £1733 when burning oil, and to £319 when burning gas, showing a clear saving with gas, of £1414 in the year, after allowing 25 per cent. for leakage or waste. The power of turning off the gas from unoccupied carriages, and from trains standing at stations, previous to starting and after arriving, would, at a fair calculation, give 15 or 20 per cent. of further saving to be added to the above.

The cost of ten train gas-holders, at £30 each, would be £300; and assuming a railway company to have 300 miles of road, requiring a small supply gasometer for filling the train gas-holders at distances of about sixty miles, six gasometers would be necessary in this case, at £40 each, making £240 total; and taking the coupling apparatus, pipes, supply bags, and glass shades, at £3 for each carriage, for 120 carriages, the cost would be £360. The total cost, therefore, of fitting up a railway 300 miles long, and having 120 carriages, reckoning ten train gas-holders, and six supply gasometers, would be £900. This, taken from £1414, leaves to a railway company, after fitting up their line and carriages complete, a sum of £514 clear, after paying all expenses for the year; and as the outlay for keeping the apparatus in repair would be small, the saving by the use of gas would afterwards amount to about £1400 per annum, in the case of ten trains as above taken.

The comparative cost of lighting railway trains with gas, is much more, as here taken, than would be found in actual practice, since there are so many additional expenses connected with the oil lamp arrangement, as at present worked, which can not be ascertained

satisfactorily, to make the statement of the cost of oil complete.—*Proceedings Inst. Mech. Engineers, London.*

A PROJECT FOR A PACIFIC RAILROAD.

The London correspondent of the *New York Herald* mentions having seen the prospectus of a company which, it is proposed to organize under the title of "The Atlantic and Pacific Junction Railroad and Land Company." The capital is set down at £10,000,000, an inadequate sum, apparently, for such an enormous undertaking, but what the undertaking precisely is, the writer does not tell us, except in a general way, that it is for the construction of a railroad from Vancouver to the lakes. The company, it is stated, intend to apply for a land grant to the extent of fifteen miles on the side of the line. Proceeding upon this system, a railroad running through an entirely new country, which is on the eve of being settled, but in which no settlements have yet been actually formed, would have a fair prospect of attaining a remunerating position in the course of a few years, as settlers, would, of course, locate along the line in the first instance.

At least seven hundred miles of the proposed route, where it crosses the prairies, is admirably fitted both for tillage and pasture; and if it is carried through the Kootana Pass, and through the Valley of the Upper Columbia, another region would be opened up, which, according to reliable accounts, is one of the most inviting on the face of the globe—mild at all seasons of the year, extremely fertile, bearing gigantic timber—in short, as the author of *The Oregon Missions* has described it, "an earthly paradise." The traffic from the Pacific terminus of such a road would, there can be no doubt, be enormous; and the benefit it would confer on the whole British possessions on this continent, can scarcely be over-estimated.

The only serious difficulty in the way of forming a continuous line on British territory would be experienced on the north shore of Lake Superior, which is a most impracticable country to cut through, and one in which there can never be much way traffic to contribute to the income of a railroad. On political grounds the British Government may desire that the road should take that direction, and Canadian interests would, doubtless, also be greatly promoted by such an arrangement, seeing the communication across Lake Superior is scarcely open for one-half the year. The distance by this route, from Collingwood to Red River, is not less than one thousand one hundred miles, over which the construction of a road would cost double the money required to make the line from Red River to Victoria.

Already there is a chain of railroads nearly complete from Detroit to St. Paul, the first portion of which, the Great Western, is a British undertaking, although on American soil. In the first instance, the great Pacific enterprise will be likely to follow this course. The people of Minnesota, in full anticipation of this, are already beginning to move the United States Government to do what is necessary on their part to aid in forming the link that will be required from St. Paul to Pembina on the British frontier. Canada, of course, would benefit by this line nearly as much as by the other, but she would benefit still more by the opening up of the resources of the North-west, if a canal were formed through the chain of lakes lying between

Lake Superior and Red River, which, according to Mr. Hibbard, who has just been over the route, is quite a feasible undertaking.

RAILWAY FREE PASSES TO THE PRESS.

There has been at all times a great deal of small talk about the independence of the press, and the use of free passes as bribes for editorial favor. It is evident that some men entertain the idea that the acceptance of a pass involves the duty of covering the sins of the management, abstaining from all unfavorable comment, and conferring puffs whenever called for. Some editors may accept a pass with all these obligations attached, while others, having the same view of the matter, decline it. Still another class esteem the pass as a *quid pro quo*, paid to them for sundry services willingly rendered, but for which public spirit leads them to refuse any direct remuneration. Almost daily in the management of a newspaper, the editor is called upon to give prominent notice of a change in time-table, of some excursion, of the repair of the road after some accident, to contradict an erroneous statement, and in various ways to advertise editorially the business of the different routes. For all services of this kind no pay is received. It is for the interest of the roads that such notices should be made, while, at the same time, it is a convenience to the public. The acceptance of a pass under such an understanding of the motive of the roads in conferring it, involves no break of editorial trust or duty to the public, and in no manner obligates the editor to conceal or excuse any faults in the management or the policy of the road.

The subject is really one of considerable importance, not only to the parties immediately concerned, but to the public at large. If the free pass system induces the press to sacrifice its independence, it had better be abolished entirely, for it is essential to the safety of the traveling public that a close censorship should be exercised upon railway management. Accidents should be freely discussed; if blame fairly attaches to employees or directors, there should be no concealment; and any influence which tends to interfere with a fair expression of public opinion on such occasions, is a serious evil. Our belief is that the great body of the editorial fraternity are above being influenced by a free pass, to the amount of bestowing unwarranted praise, or covering up a fault in the management of our railways. We do not believe that the editorial profession ride free over the roads as much as some very sensitive stockholders believe. So far as our knowledge extends, they certainly do not. We further believe that a trip over any railway by the editor of any respectable and well conducted paper, is of direct advantage to the interests of the company. But it by no means follows that every body connected with a newspaper should ride free any more than every *attache* or employee of a hotel, steamboat or railway company should. Those men who have had long experience in railway management know that the very smallest proportion of free passes are granted to newspaper editors, they know, too, that it is of advantage to have this class of men pass over their line. We know that it is of more advantage to the companies in the long run, than it is to the editors. The courtesy of a free pass to a journal like ours is repaid four fold; perhaps not in the form of a puff of the line, but in the more substantial form of ex-

perience gained in some new improvement in mechanical matters or in details of management, which our readers, most of them engaged in railway operation throughout the country, get the benefit of. The class of stockholders who make so great an outcry about free passes to editors, are usually that most ignorant of the whole subject of railway management, and as they must open their mouths at the meetings, they choose this topic because it is the only one they can talk upon. When stockholders have not confidence enough to entrust the matter to the discretion of their officers, they should elect new ones.—*Railway Times*.

THE NORTHERN RAILROAD.

The request of the Northern Railway Company for a sufficient advance from the Provincial Government to place their road in such a state of repair as to enable them to carry on their business with safety to the public and with advantage to themselves, has been met by an Order in Council authorizing the expenditure under the supervision of the Government Engineer, of the sum of \$49,090, as recommended in the following report of the Board of Railway Commissioners:

"The Board, therefore, recommend that an advance be made, under Mr. Keefer's (the Inspecting Engineer's) report, to the amount of \$49,090, on condition that the Company do consent to an immediate decree by which the lien of the Province may be immediately enforced, if the Government find it necessary to avail themselves of it, to protect the interests of the Province, and that the said advance be made on the report and estimate of the Inspecting Engineer, as the works are proceeded with."

Upon this report, the Council decided that the condition of the advance should be, that the decree for foreclosure should be in default of the Company repaying the sum to be advanced as recommended by the Board, and that as no period was fixed by the commissioners for repayment of the sum with interest, from the time of the advance, the period of one year from this date be named.—*Toronto Atlas*.

A DRY GOODS PRINCE.

The following article, we select, as of universal interest. We know not where, in the world, such an extraordinary fact, as is therein stated, could have occurred, but in our own country. "Stewart's" is one of the representative facts of American business enterprise:

Stewart's Palace has been enlarged within a few days by the addition of what is equivalent to three first class stores—that is, a building 75 by 100 feet, so that the entire dimensions are now 150 feet on Broadway by about 175 on Reade and Chambers streets. We thus have a structure which is a just object of pride, and is believed to have no superior in any country among houses devoted to commercial purposes. The fact is remarkable, simply as an instance of individual success; or of great achievement from small beginnings. Of the great number who choose the mercantile profession, by far the largest proportion are doomed to disappointment and disastrous failure, and of those who succeed, a number insignificant in comparison rise to a position of permanent affluence.

With regard to the latter class, the secret of their success is an enigma which the in-

quisitive always seek to unravel. Mr. Stewart, relying on his own unaided resources, opened a store in Broadway in the year 1825, occupying a floor jointly with another shopkeeper, from whom he was separated by a board partition—leaving the space of twelve by thirty feet available for the incipient "marble palace." By previous years of study for the ministry, principles of honesty were inculcated which, applied to mercantile pursuits, have commended themselves for secular use. Any misrepresentations as to the character of goods, or any resort to the "tricks of trade" among employees, has always been a sufficient cause for dismissal. One price is adopted, and that governed by quality. Branch houses are established at Paris, Lyons, Manchester, and Belfast, the great centers of the manufacturing interest abroad, through whom orders are filled, without the intervention of commission houses, so that goods are procured on terms the most advantageous as to cost and kind; and with regard to American manufactures a liberal course is pursued, by substituting their fabrics for foreign, so far as they are adapted to the demands of trade. These principles and arrangements, with thorough system in the several departments and close observation, have thus far produced their good results.

After two removals, Mr. Stewart, in September, 1846, located his store on its present site, in contravention of strong existing prejudices against that side of the street, and in disregard of the prediction that failure must ensue. The building, so large and costly, was described in a public journal as a "monument of folly and extravagance." Notwithstanding, two enlargements have since been made, the second and last being completed September 20, 1858, the twelfth anniversary of the original opening. The value of this building is said to be at least \$1,000,000, and we are assured that the owner would not sell it for \$1,500,000. It would easily bring a rent of \$100,000 per annum. The value of the stock on hand is rarely less than \$3,000,000. The present working force comprises 400 persons, exclusive of a still larger number, mostly women, employed outside in making cloaks and other similar articles made necessary by the changes of the season.

The new addition affords a fine display of "magnificent distances," and the several floors, lighted from the roof, through openings in the center, have the effect of a series of galleries, extending upward to a dizzy elevation. The walls are tastefully pannelled and decorated in frescoes. Of other features it is needless to speak more in detail. The building constitutes one of the chief architectural attractions of the city.—*Journal of Commerce*.

ATLANTIC AND GREAT WESTERN R. R.—The New York Times contains a long letter from Mr. Ward, President of this Company, defending it from the disparaging remarks of the Press, with reference to the enterprise. It contains nothing new; but, according to the Times, it embraces a number of glaring misrepresentations. Now that this movement has appeared on the surface once more, we shall, at another time, present an impartial sketch of its history.

Mr. Moran was, on Wednesday last, unanimously re-elected President of the New York and Erie Railroad.

A BULLION BANK.

The following is rather a new idea in banking, but we believe the plan suggested would succeed :

"A movement is in progress in New York for the establishment of a bullion bank. The plan is to found a bank which shall discount only to the extent of its own capital. Its deposits are not to be used, any part of them, by the bank, but are to be retained always in actual cash to the order of the several depositors; the deposits will, consequently, be always, to the full amount, on hand, in coin. The revenue of the bank (other than the interest on its own capital) is to consist of small banking commissions charged to depositors; on small accounts more, on large accounts less. The largest commission proposed is 1.10 of one per cent., or \$5 on a person's income of \$5,000 per annum; on larger accounts, as low as 2.100 of one per cent., and on very large accounts a small annual sum in lieu of commissions. As its projectors propose to limit the dividends to 7 per cent., these charges will be reduced with the increase of business, and will always be kept down to the amount actually necessary to pay expenses. It is urged by the projectors that if this bank be in first-rate hands, and, consequently, its credit perfect, its certificates of deposit representing actual coin in New York, will be the most desirable medium of remittance, and will be used not to circulate as money, but for purposes of remittance to an extent sufficient to sustain the bank."

STEAM CANAL BOATS.

We copy the following from the Buffalo Commercial Advertiser of Friday :

Mr. E. S. Prosser has built at Van Slyke & Notter's yard, a new canal boat, upon an original plan, a description of which we append. Mr. D. Bell built the engine, which is an upright one, with two cylinders, 14 by 14 inches, and 14 inches stroke. The boiler is of the locomotive description, containing fifty small flues, and three larger ones. The engine is of the power of eighty horses, and it is expected can be run with from two to two and a half tons of coal per diem. The smoke-stack is jointed, so that it may be lowered to pass beneath bridges.

The boat is 97 feet in length, breadth of beam 17½ feet, with depth of lower hold 6½ feet, and height between decks 6¼ feet, with a total of fourteen feet five inches from the keel to the upper deck. Her lower hold is capable of stowing 1,000 barrels of flour, with capacity for 800 barrels on the main deck.

The engine and its appurtenances occupy but little space comparatively, only ten barrels capacity in the lower hold is used, the main deck aft containing most of the machinery, which occupies but twenty-one feet. The propeller is of the Philadelphia pattern 5½ feet in diameter. On the main deck forward is a neat and comfortable cabin, 15 by 12 feet, containing state-rooms, etc. The wheel for steering is placed aft of the cabin bulk-heads, affording the wheelman a clear view the en-

tire length of the deck. The boat will draw only five feet of water with 150 tons load, and but six feet when carrying her full burden. It is anticipated that a speed of from four to six miles per hour may be obtained while towing a loaded canal boat.

IMPORTANT VERDICT.

The following is good law, although apparently a hard case. Too many people submit to things for the "influence of their names," without considering how far they are deceiving the community :

"The Pittsburg and Connellsville Railroad Company has obtained a verdict against General William Robinson, Jr., of Pittsburg, for the sum \$6,900. It appears, by a statement in the Pittsburg Chronicle, General Robinson subscribed for 100 shares of the stock of the Company in 1857, when General Larimer was the President, but never paid up. The defense was, that the subscription was made at the instance of General Larimer, with the understanding that General Robinson would never be called upon to pay it, the Company desiring only to have the influence of his name. It was further contended that the stock had been transferred by General Robinson to General Larimer, and by the latter to the Company, and that therefore any claim that might have existed against the defendant was extinguished, and the plaintiffs could not recover. The jury, however, thought otherwise, and gave a verdict against Gen. Robinson for the whole amount of stock with interest."

EXPORTS OF TEA FROM CHINA.

The following statistical table proves what we were before well aware of; but, of which we had not seen authentic proof, that the consumption of Tea in Europe was much greater than in the United States, but that Coffee was more consumed here. The Coffee import is not given; but, the fact is well known, that the consumption of Coffee here is immense. Probably it is greater in the Miami Country than in any equal section in the world. It will be seen, that the consumption of Tea is not increasing in the United States, and probably will not.

We are indebted to a friend for the following table, which shows the comparative amount of tea exported from China to the United States and Great Britain, for each of the last seven years :

TO THE UNITED STATES.			
	Green, lbs.	Black, lbs.	Total.
1852.....	30,671,072	13,370,754	34,041,826
1853.....	26,318,631	14,431,608	40,750,239
1854.....	21,713,321	11,333,308	33,046,629
1855.....	22,618,166	7,582,732	30,200,898
1856.....	24,358,574	15,277,304	39,635,878
1857.....	17,386,721	7,913,573	25,300,296
1858.....	18,002,586	11,732,682	29,735,268
TO GREAT BRITAIN.			
1852.....	Green and Black.....		68,746,000
1853.....	.....		70,869,300
1854.....	.....		80,694,788
1855.....	.....		80,306,623
1856.....	.....		90,366,470
1857.....	.....		60,089,892
1858.....	.....		77,459,263

R. R. CONVENTION AT NIAGARA FALLS.

Agreeably to previous notice, a convention consisting of delegates from a large portion of the railroads in the country, met at the Cataract House, Niagara Falls, on the 13th inst.

On motion of Hon. Erastus Corning, John Brough was appointed President, and H. E. Sargent, John Durand, and R. S. Brown were appointed Secretaries.

Moved by Mr. Sloan, that a committee of nine be appointed by the Chair to consider and report on the subject of time table, which was carried, and the following committee appointed :

C. Vibbard, N. Y. C.; C. W. Chapin, G. W. Mass.; G. W. Cass, P. H. W. & C.; C. Morgan, N. Y. & E.; W. P. Smith, B. & O.; H. Nottingham, C. & E.; E. Flint, C. C. & C.; J. Durand, L. M. & C. & X.; R. M. Rice, M. C.

Moved by Mr. Dennison, that a committee of seven, to act with the President of the Convention, be appointed by the Chair to prepare business for the consideration of the convention. Carried, and the following committee appointed :

John Brough, Bellefontaine; J. N. Dennison, Jr., L. M. & C. & X.; J. W. Brooks, M. C.; A. Stone, Jr., G. W. Cass, P. Ft. W. & C.; S. M. Hubby, C. C. & C.; Geo. H. Burroughs, T. & W.; John Van Northwick, C. B. & Q.

Moved by Mr. Brooks and carried, that the General Freight Agents of the lines represented be appointed a committee to prepare freight tariffs for the winter, to be submitted to the convention for its action thereon.

After which the convention adjourned to allow the committees to prepare their reports and for general consultation.

THURSDAY, Oct. 14—P. M.

The committee on time reported the following time table, which was ordered to take effect on the 19th November :

GOING WEST.

Leave New York at.....	8.00 A. M.	4.30 P. M.
Arrive at Buffalo at.....	2.30 A. M.	11.30 A. M.
Leave Buffalo at.....	3.00 A. M.	11.45 A. M.
Arrive at Windsor at.....	1.30 P. M.	10.15 P. M.
Leave Detroit at.....	3.00 P. M.	10.30 P. M.
Arrive at Chicago at.....	4.00 P. M.	11.15 A. M.

GOING EAST.

Leave Chicago at.....	5.20 A. M.	8.00 P. M.
Arrive at Detroit at.....	5.30 P. M.	9.30 A. M.
Leave Windsor at.....	6.30 P. M.	10.45 A. M.
Arrive at Buffalo at.....	4.30 A. M.	9.00 P. M.
Leave Buffalo at.....	5.30 A. M.	10.00 P. M.
Arrive at New York at.....	11.30 P. M.	4.30 P. M.

The Committee appointed to prepare business for the Convention, submitted a report, and offered a resolution, that the four Eastern roads, east of the Suspension Bridge, Buffalo, Pittsburg, and Wheeling, shall have power to fix the price of all westward bound freight, and that the roads west of those points shall have power to fix the rates of all eastward bound freights.

After much discussion the eastern roads refused to vote on the resolution. The vote was taken, and carried unanimously by the western roads.

Giles F. Ward, Esq., has resigned the Presidency of the New Haven, New London, and Stonington Railroad Company, and C. S. Bushnell, Esq., of New Haven has been elected to the vacancy. His acceptance of the place is a guaranty of the immediate completion of the Extension Road.

OFFICE NEW YORK AND ERIE R. R. Co., }
New York, Sept. 2^d, 1858. }

The entire issue of 1st Mort. Bonds is....\$3,000,000
And of 2d Mortgage Bonds is..... 4,000,000

	Sept. 30, 1857.	Mar. 30, 1858	Aug. 30, 1858.
Bills payable.....	\$1,982,482	1,174,435	745,462
Accounts payable, includ- ing coupons past due, less cash and accounts receivable.....	342,934	421,504	.....
Coupons past due, and ac- counts payable, and ac- counts receivable, not being made up.....	.....	.....	378,472

Surplus..... \$160,000

After the experience of the past twelve months, I am more convinced than ever that no scheme to extirpate the Company from its financial embarrassments could be devised which would offer the same advantages to all the interests involved, as the one adopted by the Company. To the holders of unsecured bonds it affords an opportunity to exchange them into Mortgage Bonds,

Believe me, gentlemen, respectfully yours,
CHAS. MORAN, President.

The road earnings are one hundred and sixty-nine thousand seven hundred and twelve dollars and twenty-six cents, \$100 in excess of those of the preceding year, and show an increase of forty-seven thousand six hundred and twenty-six dollars on the corresponding nine months of the year previous. The nine months of the past year compared, it will be borne in mind, embraced all the panic months. The per centum of expenses on receipts was fifty-two, and the net gain 3.32 per cent. on the entire cost of the road.

Total.....\$17,575 01

RAILROAD EARNINGS.—It is stated that the Hudson River Railroad, for the year ending September 30th, earned in gross about \$1,640,000, as against \$1,901,000 the previous year. The road was operated at an expense less by \$312,000 than the year before.

The following is a comparative statement of earnings of the Michigan Southern and Northern Indiana Railroad for July, August, and September, in 1857 and 1858:

	1857.	1858.
Passengers.....	\$347,831 84	\$246,461 57
Freight.....	209,825 30	264,934 40
Mails, Express, etc.....	23,575 98	63,234 12
Total.....	\$581,233 12	\$574,630 08
Decrease in gross earnings.....		11,173 03

The expenditures of the same periods were:

1857.....	\$453,434 17
1858.....	271,888 48

Showing a decrease in expenditures of.....\$181,545 87
—Leaving for net earnings for three months \$302,761 25, or at the rate of about 7 per cent. on the entire debt and stock.

The business of the Illinois Central Railroad, for September, was as follows:

LAND DEPARTMENT.

Acres Construction Lands sold.....	1,648.28	for \$20,979 73
Acres Interest Fund Lands sold.....	100.00	for 3,836 80
Acres Free Lands sold.....	671.78	for 11,236 14

Total sales during the month.....	2,420.06	for \$36,052 67
To which add Town Lots sales.....		408 95

Total of all.....\$36,461 62

Acres sold since 1st Jan'y, 1858.....	43,480 63	for \$ 595,884 99
Acres sold previously.....	1,200,933.78	for 15,311,440 40

Total.....1,244,814.31 for \$15,907,825 39

Construction Bonds canceled in Sept., 1858.....	\$ 48,500
Do. canceled previously.....	757,000

Free Land Bonds canceled in Sept., 1858.....	\$ 9,000
Do. canceled previously.....	98,000

Total Bonds canceled up to Sept. 30, 1858.....\$912,500

TRAFFIC DEPARTMENT.

Receipts from passengers.....	\$ 82,582 11
Do. freight.....	115,004 36
Do. mails.....	6,358 33
Do. rent of road.....	5,237 44
Do. other sources.....	1,767 45

Total receipts in September, 1858.....	\$212,149 69
Do. 1857.....	238,925 88

Total receipts since 1st Jan'y, 1858.....	\$1,441,921 68
Total receipts in corresponding period, of 1857.....	1,717,727 48

The September earnings of the Rock Island Railroad were in—

1857.....	\$197,011
1858.....	89,100

Decrease.....\$107,912

The earnings of the Cleveland and Toledo Railroad for September, were.....	\$83,400
Estimate expenses.....	\$27,270
Interest.....	23,000
Rent.....	5,500
	85,770

Net earnings.....\$27,030

The earnings of the Norwich and Worcester Railroad, for the month of September, 1857 and 1858, were:

	1857.	1858.
Passengers.....	\$17,367	\$15,352
Freight.....	14,447	16,435

\$32,314

\$31,837

Decrease.....\$477

The following are the receipts on the Morris Canal, for the week and season to 25th ult., as compared with corresponding time last year:

Total to September 25, 1857.....	\$226,757 92
Week ending October 3, 1857.....	7,547 69

\$234,305 61

Total to Sept. 24, 1858.....	\$190,860 24
Week ending October 2, 1858.....	8,438 67

199,298 91

Decrease in 1858.....\$35,000 70

The earnings of the Terre Haute, Alton and St. Louis Railroad Company, for the month of September, were:

1858.....	\$79,453 32
1857.....	78,991 67

Increase.....\$461 65

The earnings of the Galena and Chicago Union Railroad Company, for September, as compared with last year, are as follows:

1857.	1858.	Decrease.
Freight.....	\$170,621 62	\$106,924 33
Passengers.....	75 123 25	49,623 51
Mails, etc.....	5,209 48	5,000 00
		209 88
Total.....	\$250,354 45	\$160,948 34
Corrected earnings for the previous month, \$122,550 70.		

The revenue of the Baltimore and Ohio Railroad, for September, was as follows:

Passengers.	Freight.	Total.
Main Stem.....	\$71,335 18	\$268,715 87
N. W. Va.	3,490 22	9,725 75
Wash. Br.	32,009 95	11,044 88
		43,954 23

Totals.....\$108,135 35

\$289,485 90

\$397,621 25

The revenue of the past month, as compared with the same period last year, is as follows:

1857.	1858.	Decrease.
September, 1858.....	\$340,031 05	\$13,615 97
Do. 1857.....	402,231 11	

Decrease.....\$62,180 07

1857.	1858.	Decrease.
September, 1858.....	\$13,954 23	\$307,621 25
Do. 1857.....	43,698 50	457,329 62

Increase.....\$855 73

Decr. \$57,768 27

The above table shows a decrease on the Main Stem of \$62,180 07, from which is to be deducted \$13,615 97 received on the North-western Virginia Branch, which leaves a decrease of \$48,564 10. There is an increase of \$855 72 on the Washington Branch, making a total decrease of the road, as compared with September of last year, of \$47,705 37.

The earnings of the Chicago, Burlington and Quincy Railroad in September, between Chicago and Burlington, a distance of 210 miles, were:

Freight.....	\$94,511 86
Passengers.....	42,087 99
Mails and miscellaneous.....	2,150 83

Total.....\$138,750 68

The earnings of the Quincy and Chicago (late North-cross) Railroad, extending from its junction with the Chicago, Burlington and Quincy Railroad at Galesburg to Quincy, a distance of 100 miles, were:

Freight.....	\$13,539 14
Passengers.....	9,836 90
Mail and miscellaneous.....	933 33

Total.....\$24,309 37

The first week in October on the Illinois Central shows \$46,930. The land sales were \$13,363, and the receipts for lands previously sold \$32,300.

RAILROAD EARNINGS.—The annexed table gives the railroad receipts of September, as far as published:

1857.	1858.
Michigan Southern.....	\$223,833
Illinois Central.....	238,925
Toledo, Wab. & Western	78,576
Milwaukee & Miss.....	123,007
Little Miami.....	117,600
Mad River & Lake Erie.	197,011
Chicago & Rock Island.	85,871
Cleveland & Toledo.....	301,388
Michigan Central.....	260,354
Galena and Chicago.....	32,304
Sand. Mans. & Newark.	32,314
Northern & Western.....	48,770
Macon & Western.....	38,071

GETTYSBURG RAILROAD.—This road is rapidly approaching completion. It is now graded and laborers are at work laying the track. A large engine house, together with very spacious passenger and freight depots are being built at the terminus in Gettysburg. It is fully expected the work entire will be completed and ready for a grand opening, in which Baltimore will join, about the first of November coming.

EDWARD J. MANSFIELD, C. E.

OFFERS his services on Railroads, Turnpikes, or Civil Construction. He has been employed for several years in Ohio, and Tennessee, as assistant Engineer.

Refer to—

E. D. Mansfield, } Cincinnati.
T. Wrightson, }
A. Kennedy, Iowa.
C. Davies, New York.

Oct. 7-4t.

VENPORT . . . M. D. WELLMAN . . . C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

**Railway Car Manufacturers,
MASSILLON, OHIO.**

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.
Feb. 16* JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

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Also, for Water Gages, Indicators, Steam Whistles
CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

Nov

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 228 H Street, Washington, D. C. April 2

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CONTENTS.—Peter Funk Shops; Patent Safe Swindling; Pickpockets; Garroters; Gamblers, etc., etc.

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No. 4 In preparation, same subject as No. 3.

No. 5 Tricks and Traps of Horse Dealers. (No. 6) By "Frank Forister."

No. 7 On Courtship and Marriage, (in preparation.) No. 8 and 9 Chicago and the West, (in preparation.) Price, 10 cents each. Sent free by Mail.

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NOTICE is hereby given that Charles W. Granniss, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857. jy23-1m

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Power Mortising Machines, ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellows, Saws, Saw Mandrels, Turning Lathes, Dental Lat

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BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:10 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

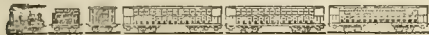
FOR THROUGH TICKETS.

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
ap10 Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, two above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

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TRABER & AUBERTY,
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LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

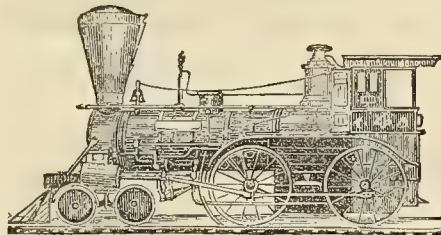
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

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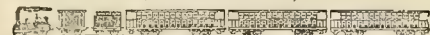
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TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
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At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

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To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

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Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7.30 A. M.—Dayton, Lima and Sandusky Mail Express.

4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; a Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER RAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6.00 P. M. Train for Hamilton.

RETURNING TRAINS

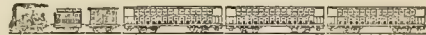
Leave Dayton at 8.05 A. M., 2.30 and 6.20 P. M.

Leave Hamilton at 6.55 A. M., 9.40 A. M., 12.10 P. M. and 4.05 and 8.00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
ROBERT HARRIS, Sup't.
Racine, May 15, 1857. my21

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.
MACHINERY of the most approved construction for Flouring and Saw Mills.
GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
STEAM BOILERS and WATER TANKS of any size or description.
SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

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—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.
RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.
Blank Books of every description, with or without printed headings, got up on short notice.
ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, (Cincinnati)

SCHENECTADY Locomotive Works,

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THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,
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RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Sup't. Aug. 13

D. M. CARHART,
TURN-TABLE BUILDER.

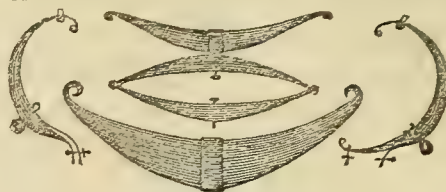
THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address,
Respectfully Yours,

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Mathematical Instrument Makers
Removed to No. 67 West 6th St.
CINCINNATI O.

M^CDANIEL & HORNER, LOCO- AND CAR MOTIVE SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to
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All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.
References.

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A. C. GRAY, Prest. New Castle Manuf. Co.
U. WELLS, R. R. Car Manuf. Petersburg, Va.
I. R. TRIMBLE, Supt. Philad. R.R. Co.
May 19.

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EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.
THOMAS DOUGHERTY, Master Mach. do.
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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, OCT 28, 1858.

Railroad Record

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SOUTHERN PACIFIC RAILROAD CO.

By a letter from Dr. Jephtha Fowlkes, President of the above company, we learn that the suit instituted in the Texas Courts, has not yet come to a trial.

The party of persons who bought up the Company's effects at the time of sale, are divided among themselves, and can present no united plan of action.

The letter says: "Before I leave I shall have all the stock sold upon which installments are unpaid, and all who wish to save their stock must pay up promptly."

"Desirous to save all *bona fide* and paying stockholders, I desire you will urge and press this point, thus leaving those who shall be cut off, no grounds of complaint.

"We shall, beyond any reasonable doubt, adjust matters and the work go on."

COVINGTON AND LEXINGTON RAILROAD.

A good deal of controversy has been going on, between the bondholders and stockholders of the Lexington Railroad. The point seems to be the non-payment of the interest. This matter lies in a nut-shell. The bondholders have the power to compel the payment. The only question,—whether it is their interest to do so? If the Company can pay, and won't, they are in the condition of the boy in the fable, they should be *made* to pay. The Directors of the road contend, that they can not pay, without certain improvements are made, and that the bondholders are directly interested in making them. This is probably true, if by making these improvements the road can pay its interest promptly and permanently; this should be the only real question at issue. In the state in which half our Railroads now are, the parties holding bonds, or stock, if they could unite their interests, would undoubtedly be gainers, by advancing a little more capital to perfect the work. But this should be done with judgment and skill.

Looking to all the circumstances connected with it, the Lexington road has more promise of future increase in its business, than almost any one we know of; for, it must be that the interior of Kentucky will soon come to a much greater degree of growth and enterprise, than it has been for many years; and that alone will give a great increase of business to the Covington road. Covington itself is now growing rapidly, and must soon be a large city. The interior counties must soon begin to manufacture more or less, and become, in all respects, more productive. In addition, it is scarcely possible to conceive how either Kentucky or Cincinnati is to do much longer without a connection with the the Southern roads, at Knoxville; and when that is done, the Covington road becomes a Trunk Line of immense value. Even the completion of the Danville line would add about 30 per cent. to the receipts of the Covington road, and at once give it power to pay not only interest on its debts, but some dividends. The creditors of the Covington and Lexington road hold, we believe, an interest of about \$3,000,000. We suppose that 20 per cent on this would complete the Danville road, and we are strongly impressed with the belief, that it would be the best paying investment they have made. If a man, who holds \$5,000 of either bonds or stocks, were to advance \$1,000, he would pay his portion to complete the road. The first and second mortgagees have, it is true, no other interest in this, than this,—to make their debt absolutely interest-paying forever, and thus bring the bonds to *par*. The third mortgagees and stockholders have *all to gain*; for, what would they get *if the road were sold out*?

A great deal that ought to be done for our Railroads, is not done, because of the *unman-*

ly fear which pervades many holders at this time, in relation to Railroads. It is thought that nothing can be gained by any advance to Railroads; but this is evidently a great mistake. There ought to be intelligence enough among Railroad mortgagees, to ascertain precisely what is needed, and then there should be courage enough to carry out a judicious plan, both of positive enterprise, and of financial economy. The Covington road paid more, in gross receipts, for the years 1856 and 1857, than we had estimated, and we are quite sure of its capacity to yield \$600,000 per annum (gross), even with its present length.

RAILROAD LAW—IMPORTANT DECISION.

A case has, within a few days, been decided, by the Circuit Court of the United States, which has a most important bearing on the transactions of many railroad companies. It is this: the Hillsborough Railroad Company wanted to complete their line from Hillsborough East to Parkersburgh. For that purpose they entered into a contract with STURGES, then a Money Broker, one part of which was that Sturges should receive \$750,000 of the Stock of the Company for \$521,677, which was about *one-third less than the par value*. Of his stock, Sturges agrees to transfer CHARLES STETSON *six hundred shares*, which, at par, was \$30,000 for the sum of \$24,000, and for this Stetson gave his note. The note was not paid at maturity, and Sturges sued Stetson on the note. These facts were pleaded in defence, and to them the plaintiff Sturges *demurred*, which is, that if true, they were *insufficient in law*. The point is, whether the Railroad Company had a right to *sell their shares below par* to the injury, as it clearly was, of Stockholders subscribing in good faith?

The Judge says:

As capital stock is not property until it shall be subscribed for, the power given to the directors in the charter, to sell the property of the company, does not apply to the disposition of capital stock. And it seems to be clear, that the power to determine the time and terms of payment of subscription of stock, can have no reference to its price. The charter declares the shares of the capital stock shall each be fifty dollars; and it would be contrary to all known rules of construction to say, that a provision which applies only to the payment of stock subscribed, shall be so construed as to repeal the provision that fixes the value of each share.

This settles the case; for, if the stock is not property till actually subscribed, the company could not sell it at all, nor could they dispose of it in any way, but by receiving subscriptions at the *par value*, for which subscriptions, when made, the stockholders are liable to full payment. The contract with Sturges was illegal and void. As to the injustice of it, there can be no doubt. Judge M'LEAN says:

A certificate of stock was issued to the

plaintiff for fifteen thousand shares, amounting to the sum of seven hundred and fifty thousand dollars, of which only five hundred, twenty-one thousand six hundred and seventy seven dollars were paid, which was less for the shares than the price fixed by the charter, by two hundred and twenty-eight thousand, three hundred and three dollars. This sum, distributed among the share holders at the time of the transaction, will show the loss they sustained. And if this be a correct construction of the powers of the directors, they may continue to reduce the price of stock, at every subsequent subscription, down to five or ten dollars a share, distributing the loss upon prior stockholders. The last subscribers, at whatever rate, would stand on equality as to future dividends, and in all other respects, with the previous subscribers for stock, who had paid in full for their shares. The injustice of such a scheme requires no demonstration. It is in conflict with the charter.

The judge declares the plea sufficient, and, consequently, there can be no recovery on the note of Sletson.

ILLS. CENTRAL R. R.

We are glad to perceive, that this Company has almost entirely recovered from the embarrassments into which they were plunged last Fall, in common with almost every Railroad Company in the country. They now advertise to pay off, on presentation, all their over-due indebtedness, amounting to over three quarters of a million of dollars.

The New York *Tribune* says, that since the assignment, the Company have paid over \$5,000,000 of interest and floating debt. The money to do this has been raised from a 20 per cent. installment on 155,000 shares, from the unpaid balance of a previous installment, from the realization of assets, and from the business of the road and land sales. The called installment has been paid upon all but about 5,000 shares, and these are delinquent only through the neglect of the holders. The stock is now distributed among 800 holders, who have paid upon it over \$10,000,000. The road has cost, in round numbers, \$30,000,000. It holds \$15,000,000 of notes taken for land sales, and about \$1,000,000 canceled bonds, and has still 1,300,000 acres of land unsold, which are estimated to be worth \$16,000,000 or \$17,000,000 more. We congratulate the managers of this great enterprise upon the improved condition of their affairs, and trust to see it enter upon a new career of prosperity, which shall realize all the anticipations which were entertained at its inception. It is a work of inestimable value to Illinois, and to the whole country, indeed, and we shall be glad to see the enterprise which originated, and the ability and capital which have carried it forward to completion, meet with a rich reward. Two or three English gentlemen of railroad experience, and who represented here a large foreign interest, have recently thoroughly ex-

amined the road and its affairs, and have re-
turned to England to report most favorably
upon it.

CIN., WILMINGTON AND ZANESVILLE R. R.

Major Borland, President of this Road, set out last week to make a reconnoissance of the route, for a continuation of this road from Morrow to Glendale. The object is, we presume, to make a connection with the Hamilton and Dayton Road, on better terms, than can now be obtained from the Little Miami Road; and, also, to take a part of the business of Warren county, which is not now properly accommodated. From Lebanon, for several miles, there is a road, already graded under the charter of the "Cincinnati and Lebanon Railroad." A part of this, we are told, is available, and by it, a short branch may be made to Lebanon, which would produce considerable business. Independent of the bridge over the Miami, the road would be very easily constructed. The length of the road would be about as follows:

Morrow to Deerfield.....	4½ miles.
Deerfield to Mason.....	6 "
Mason to Glendale.....	6 "

Making about 16½ miles, of which about 8 or half the distance, lies on the track of the Cincinnati, Lebanon and Xenia Railroad. This, with the advantage of what is already done, and an easy line, should be graded for \$150,000. The bridge, and iron, we suppose will cost as much more.

The people of Lebanon have a graded track to a connection, and it may be put in running order for \$50,000. The union of such interests, as those of the Wilmington road, the Lebanon road, and the town of Lebanon ought surely to be able to raise \$350,000, if the improvement is worth any thing. That is just the question *to be determined*. Our own impression is, that the extra business derived from Warren county will pay half the interest on the whole sum required. How far it will affect the general interests of the Wilmington road, we are not advised. But at first blush, we should say, that an independent line, or one equivalent to it, into Cincinnati, would be invaluable.

In the report of ERASMUS GEST, (made in May, 1858,) he says that a subscription had just been commenced for this object, when the explosion of the Life and Trust Company was announced, and the public mind thrown into a state of panic. But, he says:

"These arrangements, nevertheless, had one good result: they enabled us to effect a contract (executed on the 23d of July, 1857,) with the Cincinnati, Hamilton and Dayton Railroad, on terms reasonable and entirely satisfactory, for the use of their Road from Glendale to the city, including side tracks, station buildings, and *their direct rail connection, west of Mill Creek, with the Ohio & Mississippi Railroad.*"

If the Company has such a contract as

this, it is undoubtedly of great value to them, and an effort should be made to carry out the plan.

Mr. Gest has made an elaborate estimate of the amount of business, from Morrow to Cincinnati, of which the following is the result.

The several sums recapitulated are as follows :

Revenue now going to Little Miami Road.....	\$63,925 93
Revenue arising from Local Intercoarse.....	9 761 16
" " " "	5,822 00
" " City Intercoarse.....	35,000 00
" " Lebanon business.....	27,883 30
" " Through Business.....	31,735 97

Total gross revenue to Cincinnati, Wilmington and Zanesville Trains on thirty-five miles west of Morrow.....\$173,448 36

Of which three-seventh, or \$74,335 will go to Cincinnati, Hamilton and Dayton Road, and four-seventh, or \$99,113 36 to Extension.

Deduct working expenses on twenty miles.	\$29,274 00
Expenses, chargeable to Extension, of Station Hands in Cincinnati.	1,000 00
Expense Trains on Cincinnati, Hamilton and Dayton Road, total \$12,375, of which the twenty miles between Glendale will pay...	1,625 20
(the road east of Morrow the other)	

And this sum deducted from the gross earnings leaves the balance to dividend and deterioration, amounting to \$67,211 16—certainly amply sufficient.

If the Company can make a half of this net profit, (and we see no possible reason why they should not,) it will be a most profitable operation to construct the Glendale Branch. There is not a Bondholder, nor a Stockholder, who is not directly interested in the result, and not one who should not endeavor to accomplish it.

FOREIGN RAILROAD ITEMS.

We learn from our foreign exchanges that the half yearly meeting of the Great Western Railway Company, of Canada, had been held in London. The Directors report, which declares a dividend of four per cent., was adopted by a small majority, an amendment having been proposed limiting the dividend to three and a half per cent.

A resolution was agreed to, after a strong opposition, authorizing the Directors to advance £100,000 for the rolling stock of the Detroit and Milwaukee Railroad.

At the General Conference of Railway Delegates, in session at London, it was resolved to give permanent organization to the Conference, and to form from it an Association, called the Railway Companies' Association.

At a meeting of the stockholders of the Buffalo and Lake Huron Railroad in London, it was stated that the gross revenue of the half year was more than absorbed by the works in progress.

AUSTRALIA.—The contract between the Government and the six banks for the negotiation of a Railway loan, was signed August 16. The export trade was very dull. The import market was overstocked at Sydney.

[From the Atlantic Monthly.]

RAILROAD ENGINEERING IN THE UNITED STATES.

Though our country can boast of no Watt, Brindley, Smeaton, Rennie, Telford, Brunel, Stephenson, or Fairbairn, and lacks such experimenters as Tredgold, Barlow, Hodgkinson, and Clark, yet we have our Evans and Fulton, our Whistler, Latrobe, Roebling, Haupt, Ellet, Adams, and Morris,—engineers who yield to none in professional skill, and whose work will bear comparison with the best of that of Great Britain and the Continent; and if America does not show a Thames Tunnel, a Conway or Menai Tubular Bridge, or a monster steamer, yet she has a railroad bridge of eight hundred feet clear span, hung two hundred and sixty feet above one of the wildest rivers in the world,—locomotive engines climbing the Alleghanies at an ascent of five hundred feet per mile,—and twenty-five thousand miles of railroad, employing upwards of five thousand locomotives and eighty thousand cars, costing over a thousand millions of dollars, and transporting annually one hundred and thirty millions of passengers, and thirty million tons of freight,—and all this in a manner peculiarly adapted to our country, both financially and mechanically.

In England the amount of money bears a high proportion to the amount of territory; in America the reverse is the case; and the engineers of the two countries quickly recognized the fact: for we find our railroads costing from thirty thousand to forty thousand dollars per mile,—while in England, to surmount much easier natural obstacles, the cost varies from seventy-five to one hundred thousand dollars per mile.

The cost of railroad transport will probably never be so low as carriage by water,—that is, natural water communication; because the river or ocean is given to man complete and ready for use, needing no repairs, and with no interest to pay upon construction capital. Indeed, it is just beginning to be seen all over the country, that the public have both expected and received too much accommodation from the companies. Men are perfectly willing to pay five dollars for riding a hundred miles in a stage coach; but give them a nicely warmed, ventilated, cushioned, and furnished car, and carry them four or five times faster, with double the comfort, and they expect to pay only half-price,—as a friend of the writer once remarked, "Why, of course we ought to pay so much when we a'n't half so long going," as if, when they paid their fare, they not only bargained for transport from one place to another, but for the luxury of sitting in a crowded coach a certain number of hours. It would be hard to show a satisfactory basis for such an establishment of tolls. We need not wonder at the unprofitableness of many of our roads when we consider that the relative cost of transportation is—

By Stage.....one cent.
By Railroad.....two and seven-twelfths;

and the relative charge,—

By Stage.....five cents,
By Railroad.....three cents;

and the comparative profit, as five less one to three less two and seven-twelfths, or as four to five-twelfths, or as nine and six-tenths to one.

America has, it is true, a grander system of natural water communication than any other land, except Brazil; but, for all that, there is really but a small part of the area,

either of the Alleghany coal and iron fields, or of the granaries of the Mississippi valley, reached even by our matchless rivers. A certain strip or band of country, bordering the water-courses, is served by them both as regards export and import; just as much is served wherever we build a railroad. In fact, whenever we lay a road across a State, whether it connects the West directly with the East, or only with some central commercial point in the West, just so often do we open to market a band of country as long as the road, and thirty, forty, or fifty miles wide,—the width depending very much upon the cost of transport over such road; and as the charge is much less upon a railroad, than upon a common road, the distance from the road from which produce may be brought is much greater with the former than with the latter. The actual determination of the width of the band is a simple problem, when the commercial nature of the country is known.

The people of the great valley have not been slow, where Nature has denied them the natural, to make for themselves artificial rivers of iron. These railroads are more completely adapted to the physical character of the Western States, than would be any other mode of communication. The work of construction is often times very light, little more being necessary for a railroad across the prairies of the West, generally, than a couple of ditches twenty or thirty feet apart, the material taken therefrom being thrown into the intermediate space, thus forming the surface which supports the cross ties, the sills or sleepers, and the rails. Indeed, the double operation of ditching and embanking is, in some cases, performed by a single machine, (a nondescript affair, in appearance half-way between a threshing-machine and a hundred-and-twenty-pound field-piece,) drawn by six, eight, or ten pairs of oxen.

It is even probable that in a great many cases the common road would cost more than the railroad in the great central basin of America; as the rich alluvial soil, when wet in spring or fall, is almost impassable, and lack of stone and timber prevents the construction of artificial roads.

The influence of the railroad upon the Western farm lands is quickly seen by the following figures, extracted from a lately published work on railroad construction.

Table showing the Effect of Railroad Transport upon the Value of Grain in the Market of Chicago, Illinois.

	WHEAT.		CORN.	
	Carried by railroad	Carried by wagon.	Carried by railroad.	Carried by wagon.
At market....	\$49 50	49 50	25 60	25 60
Carried 10 m.	49 25	48 00	24 35	23 36
" 50 m.	48 75	42 00	24 00	17 35
" 100 m.	48 00	34 50	23 25	9 75
" 150 m.	47 25	27 10	12 50	2 25
" 200 m.	46 50	19 50	21 75	0 00
" 300 m.	45 10	4 50	20 25	0 10
" 330 m.	41 55	0 00	19 80	0 00

Thus a ton of corn carried two hundred miles costs, by wagon transport, more than it brings at market,—while, moved by railroad, it is worth \$21 75. Also wheat will not bear wagon transport of 330 miles,—while, moved that distance by railroad it is worth \$44 55 per ton.

The social effect of railroads is seen and felt by those who live in the neighborhood of large cities. The unhealthy density of population is prevented, by enabling men to live five, ten or fifteen miles away from the city, and yet do business therein. The extent of this diffusion is as the square of the speed of transport. To illustrate. If a person walks

four miles an hour, and is allowed one hour for passing from his home to his place of business, he can live four miles from his work; the area, therefore, which may be lived in is the circle of which the radius is four miles, the diameter eight miles, and the area 50½ square miles. If by horse he can go eight miles an hour, the diameter of the circle becomes sixteen miles, and the area 201 square miles. Finally, if by railroad he goes thirty miles an hour, the diameter becomes sixty miles, and the area 2,827 square miles.

In the case of railroads, as of other labor-saving (and labor producing) contrivances, the innovation has been loudly decried; but though it does render some classes of labor useless, and throw out of employment some persons, it creates new labor for more than the old, and gives much more than it takes away.

Twenty years of experience show that the diminished cost of transport by railroad invariably augments the amount of commerce transacted, and in a much larger ratio than the reduction of cost. It is estimated by Dr. Lardner that three hundred thousand horses, working daily in stages, would be required to perform the passenger traffic alone which took place in England during the year 1848.

Regarding the safety of railroad traveling, though the papers teem with awful calamities from collisions and other causes, yet so great is the number of persons who use the new mode of transport, that traveling by railroad is really about one hundred times safer than by stage. The mortality upon English roads was for one year observed:—one person killed for each sixty-five million transported; in America, for the same time, one in forty-one million.

If we should try to reason from the rate of past railroad growth as to what the future is to be, we should soon be lost in figures. Thus, in the United States,—

In 1829 there were.....	3 miles.
In 1830.....	41 miles.
In 1841.....	2 167 miles.
In 1850.....	7 355 miles.
In 1856.....	23 242 miles.

Thus from 1830 to 1840, the rate is as $\frac{21.67}{41}$, or 53 nearly; from 1840 to 1850, $\frac{7.355}{21.67}$, or nearly; and from 1850 to 1856, $\frac{23.242}{7.355}$, or 3 nearly; and from 1850 to 1860 we may suppose the rate will be about 4. The rate is probably now at its permanent maximum, taking the whole country together,—the increase in New England having nearly ceased, while west of the Mississippi it has not reached its average.

Among the larger and more important roads and connected systems in our country may be named the New York and Erie Railroad Company,—connecting the city of New York with Lake Erie at Dunkirk, (and, by the road's diverging from its western terminus, with "all places West and South," as the bills say.)—crossing the Shawangunk Mountains through the valley of the Never-sink, up the Delaware, down the Susquehanna, and through the rich West of the Empire State.

The Pennsylvania Central Railroad: from Philadelphia through Lancaster to Harrisburg, on the Susquehanna, up the Juniata and down the western slope of the Alleghanies, through rock-cut galleries and over numberless bridges, reaching at last the bluffs where smoky Pittsburg sees the Ohio start on its noble course.

The Baltimore and Ohio Railroad: from Baltimore, in Maryland, to Wheeling and Parkersburg, on the Ohio; crossing the low-

lands to the Washington Junction, thence up the Patapsco, down the Monocacy, to the Potomac; up to Harper's Ferry, where the Potomac and the Shenandoah chafe the rocky base of the romantic little town perched high above; winding up the North Branch to Cumberland, the terminus of the Chesapeake and Ohio Canal, and of the great national turnpike to the West, for which Wills' Creek opened so grand a gate at the narrows,—to Piedmont the foot and Altamont the summit, through Savage Valley and Crabtree Gorge, across the glades, from which the water flows east to the Chesapeake Bay and west to the Gulf of Mexico; down Saltlick Creek, and up the slopes of Great River and Laurel Hill, till rivers dwindle to creeks, creeks to rills, and rills loose themselves on the flanks of mountains which bar the passage of every thing except the railroad; thence, through tunnels of rock and tunnels of iron, descending Tygart's Valley to the Monongahela, and thence through a varied but less rugged country to Moundsville, twelve miles below Wheeling, on the Ohio River.

These are our three great roads where engineering skill has triumphed over natural obstacles. We have another class of great lines to which the obstacles were not so much mechanical as financial,—the physical difficulties being quite secondary. Such are the trunk lines from the East to the West,—through Buffalo, Erie, and Cleveland, to Toledo and Detroit, and from Detroit to Chicago, Rock Island, Burlington, Quincy, and St. Louis; from Pittsburg, Wheeling, and Parkersburg, on the Ohio, to Cleveland, Columbus, Cincinnati, Indianapolis, Louisville, and St. Louis; and from Cleveland, through Columbus to Cincinnati, and from Cincinnati to the North-west.

In progress also may be noticed roads running west from St. Louis, Hannibal and Burlington on the Mississippi, all tending toward some point in Kansas, from which the great Pacific Road, the crowning effort of American railroad engineering, may be supposed to take its departure for California and Oregon.

The chief point of difference between the English and the American engineer is, that the former defies all opposition from river and mountain, maintains his line straight and level, fights nature at every point, cares neither for height nor depth, rock nor torrent, builds his matchless roads through the snowy woods of Canada, or over the sandy plains of Egypt with as much unconcern as among the pleasant fields of Hertford or Surrey, and spans with equal ease the Thames, the Severn, the St. Lawrence, and the Nile. The words "fail," "impossible," "can't be done," he knows not; and when all other means of finding a firm base whereon to build his bridges and viaducts fail, he puts in a foundation of golden guineas and silver dollars, which always gives success.

On the other hand, the American engineer, always respectful, (though none the less determined) in the presence of natural obstacles to his progress, bows politely to the opposing mountain-range, and, bowing, passes around the base, saying, as he looks back, "You see, friend, we need have no hard feelings—the world is large enough for thee and me." To the broad sweeping river he gently hints, "Nearer your source you are not so big, and, as I turned out for the mountain, why should I not for the river?" till mountain and river, alike aghast at the bold pigmy, look in silent wonder at the thundering train which shoulders aside granite hills, and tramples rivers

beneath his feet. But if Nature corners him between rocks heavenward piled on the one hand, and roaring torrents on the other, whether to pass is required a bridge or a tunnel, we find either or both designed and built in a manner which can not be bettered. He is well aware that the directors like rather to see short columns of figures on their treasurer's books than to read records of great mechanical triumphs in their engineers' reports.

[CONTINUED NEXT WEEK.]

RAILROAD BUILDING IN RUSSIA—FLOUR MILLS.

ST. PETERSBURG, Sept. 14, 1858.

To-day subscriptions for the bonds of the great Railroad Company began to come in. There was a crowd: six cashiers were hardly able to count and receive the subscriber's deposits. For each bond, a tenth of the nominal capital, or 50 roubles must be paid down. As it is expected that the amount subscribed will be much greater than the capital required by the Company, it is announced that the deposits for all the bonds not delivered will be restored.

It is said that on this, the first day, seven millions roubles' worth of bonds were signed. The subscription is to remain open for ten days, and it is likely that more than one hundred million roubles will be subscribed during that time, for the number of subscribers usually increases during the last days. As the Company desires but thirty-five millions, the bonds will evidently command high premiums in the market after the first day. This premium, like that for shares, will be more considerable for the bonds delivered than for the promises to deliver (*promesses d'obligations*).

A large proportion of the sales made to-day were upon speculation. The distribution among the individual proprietors is to be made subsequently. Hence, while the speculator who buys a promise to deliver, confines his speculation to the premium which he can obtain by subsequent sale, the holder of a bond entirely free will derive from it a much more considerable profit.

The holder of a *promesse d'obligation* by freeing it, is allowed a discount of $3\frac{1}{2}$ per cent. per annum, something like 8 or 9 roubles a bond. By sending it then to Paris, for instance, to negotiate it there (which is easily done, since the bonds will be indorsed 500 roubles, 2,000 francs, 80 pounds sterling, 536 thalers, and 944 Dutch florins, to facilitate transactions); by selling there the bond merely at par, with no premium, and having the proceeds put into a draft upon St. Petersburg, the speculator will gain from five to seven per cent., or twenty-five to thirty-five roubles. You may, therefore, expect soon to see in the Paris market bonds delivered at St. Petersburg. On the other hand, it will naturally follow in course of time that the market price of these bonds in Paris will be lower than that which they will command here.

Now that we are speaking of railroads, let me say that the line from St. Petersburg to Peterhof is about to have a branch to Krasnoe-Szelo, the place where the camp of the Imperial Guard is pitched every Summer, and where all the reviews take place. There will be no great amount of travel in Winter, but in Summer there will probably be not a little, without reckoning the employment of the road by the Government for the transportation of troops, already a source of revenue to the main line from Peterhof. The grant

is made, like that of the Peterhof road, in the name of the Baron Steiglitz.

Russia, which exports, in average years, wheat to the value of more than one hundred millions francs, sends almost the whole quantity abroad in the shape of grain, while America exports more than half of her wheat as flour. Russian statisticians some time since called the attention of the public to this fact, and have attempted to show how much we should be likely to gain by selling our wheat only in the form of flour. If, however, the exportation of this commodity has, even to this day, remained an insignificant item in the trade of Russia, the fact must be attributed to the imperfect preparation of our flour. The introduction of steam mills will tend sensibly to its improvement in quality. It is only recently that some attempts to introduce them into Russia have been made.

To-day I am enabled to announce a new enterprise of this character. A company has just been formed with a capital of 400,000 roubles, for the establishment at Rostov, upon the Don, one of the most important southern ports, of a steam mill of more than twenty-four pairs of mill-stones. One can not doubt the success of the enterprise. It is only to be wished that the example may be followed soon at Odessa, Taganrog, and other grain-exporting ports.—Translated for the Tribune from *Le Nord*.

MISSISSIPPI AND MISSOURI RAILROAD.

We understand that the grade stakes on this road are nearly all set through this county, and about forty miles of the road is now ready for grading. The Company promised the citizens of this county, that from three to four hundred hands would be placed upon the work early in the month of September. We hope, for the credit of the Company, this promise will be kept.

Mr. JOHN A. DIX, the president of the road, in his letter to certain citizens of Polk county, said that the Company would build the road whenever the counties through which it is to pass—would furnish one-third of the means in county bonds to complete it.

Our county has voted a loan of \$300,000, and Douglas county has voted \$200,000, making the sum of \$500,000, which will be issued to the Company whenever it gives *reliable assurance* that the work will be commenced and pushed forward to completion for forty miles east from this city.

What more does the Company ask?—What more can the counties be expected to do?

We are ready to comply with all the requirements heretofore made by the Company, and we ask on their part a compliance with, and a faithful carrying out of the pledges heretofore made.

It has been suggested by some, that this late move by the Company, has been made with the view to retard the action of our citizens in regard to the Council Bluffs and St. Joseph Railroad. This we can not believe, and will not believe that such is their object until we see that the Company fails to put the hands promised at work upon the road. If the Company fails to comply with their promise within the *present month*, we will then say that our confidence is so far shaken in their integrity, as to warrant us in getting up a petition asking the County Judge to submit the question of diverting the loan voted from the Mississippi and Missouri Railroad; and giving it to Council Bluffs and St. Joseph Railroad. We have defended the integrity of this

Company in opposition to the views of some of our best friends, and our most enterprising citizens. If we have been humbugged by the Company, and have done an injury to our city by hanging to it so long, we promise to make amends by advocating the diversion of the loan *without reserve or condition* as above stated, if the Company fail to put hands upon the work and actually commence grading by the first day of November.

We have every confidence that the work will be commenced by that time, with a *bona fide* intention on the part of the Company to push it forward as fast as possible to completion.

We would suggest to the Company in as much as they have *twenty-three* Locomotives unemployed, that they ship one of them around to this city. A sight of the "Iron Horse," in these parts, would be a great relief to some of our citizens who are troubled with the "blues," on account of the long delay made in commencing the work, and we confess for our own part, that we view the matter as did the Irishman the subject of having whisky in Heaven. He said: "If whisky can neither be ate or drank up there, it would look dacent to have a wee drap upon the table."

Send one of your idle Locomotives round to this city. Our citizens would delight in furnishing stabling, free of charge, for the "old hoss."—*Weekly Bugle*.

SELMA AND GULF RAILROAD.

On the night of the 7th inst., a large meeting of the citizens of Selma was held in relation to this road—the mayor, Mr. Keith, being chairman, and Mr. John Hardy, secretary. Col. J. W. Lapsey made a speech and moved the resolutions. Speeches were also made by Col. W. T. Winter, Rev. J. P. Perham, and Col. W. S. Burr. The resolutions were as follows:

1. *Resolved*, That we regard the proposed Selma and Gulf Railroad as an enterprise of the highest importance to the people of a large portion of the State as well as to those of our immediate section; and we hail with pleasure the movements that have for their object its early completion.

2. That we believe said Railroad to be essential—not to say indispensable—to the proper development of the agricultural resources of the country adjacent to it, and to the other Railroads with which it is expected to be connected; but more especially the coal, iron, and other valuable minerals, known to be so abundant in the country intersected by the Alabama and Tennessee River Railroad.

3. That we have strong faith in the early accomplishment of this great work, those who are most deeply and directly interested will unite in the determination that it should be done; that all that is requisite to ensure its success at an early day, is liberal and united action.

4. That for the purpose of promoting the object expressed in the last preceding resolutions, a general convention of the friends of the Selma and Gulf Railroad be held in Selma, on Wednesday, the 10th day of November next, and that all the friends of said road with the friends of the Alabama and Tennessee River—the Alabama and Mississippi Rivers—the Marion and Cahaba—the Alabama and Florida—the Central, and the Tennessee and Coosa Railroads—be, and they are here-

by, respectfully and cordially invited to attend said convention.

5. That a barbecue suitable for the occasion, and for those who may attend the convention, be provided.

6. That the Chairman appoint the following committees to consist of such numbers as he may deem proper:

First. A committee to receive subscriptions, and to provide the means required for the barbecue.

Second. A committee of arrangements to take in charge the means to be provided for the barbecue, and superintend the preparations for the same; with power to appoint such managers as they may deem proper for the occasion.

Third. A committee of invitations, to invite specially such persons as they may deem proper.

7. That the citizens of Selma be and they are hereby respectfully requested to throw open their dwellings for the accommodation of those who may be in attendance on the convention from a distance.

8. That all the merchants of Selma be and they are hereby respectfully requested to close their stores, at and after 10 o'clock, on the day of the convention.

Full committees, as provided for in the resolutions, were appointed.

TRADE WITH GREAT BRITAIN AND EUROPE.

The official returns of the Treasury Department, says the *Economist*, show a very rapid augmentation of trade with Great Britain in the last fifteen years, but always with a large balance due the United States. The aggregates are as follows, at different periods:

	Exports		Total.
	Domestic.	Foreign.	
1837.....	49,685,206	4,897,314	54,582,520
1842.....	38,254,511	3,012,419	41,266,930
1847.....	86,206,935	1,028,421	87,235,357
1851.....	109,531,712	8,414,403	117,946,115
1857.....	182,658,472	3,196,312	185,854,784
	Imports.		Total.
	Domestic.	Foreign.	
1837.....	41,886,193	12,696,377	54,582,570
1842.....	34,204,249	7,662,681	41,866,930
1847.....	67,538,628	19,696,729	87,235,357
1851.....	93,847,886	24,698,229	118,546,115
1857.....	131,103,093	54,743,691	185,846,784

The balance due the United States by England is an annually increasing one.—In other words, the purchases of American produce by Great Britain annually increase in a ratio faster than do the imports of goods into the United States from Great Britain. Much of the United States produce that reaches England, goes thence, no doubt, to the Continent and elsewhere, the warehouses of England serving as a sort of factor to the rest of the commercial world, and much of the goods imported into the United States from Great Britain, come there in transit from the Continent. Nevertheless, there is always a large cash balance due the United States from Great Britain. Gold enters largely into the exports to Great Britain, but it is always destined to meet the American bills running on Great Britain from other quarters of the world. If we take the business of 1857, and deduct the specie movements, we have results as follows:

Export to Great Britain.....	\$185,846,784
Less Specie.....	50,890,268
Net exports.....	134,956,516
Imports from Great Britain.....	\$131,103,093
Less Specie.....	4,069,854
Net imports.....	\$127,034,239

These leaves a balance of \$7,922,477 still due by Great Britain to the United States, in addition to those accounts earned by trading voyages between the West Indies and South America and the Northern ports of Europe, the proceeds being generally placed with the London bankers. England is always largely the debtor of the United States. With France the change has been as follows in the last six years of active business:

	Exports		Total exports.
	Domestic.	Foreign.	
1851.....	\$25,302,085	2,950,061	28,252,146
1857.....	37,218,440	1,020,547	38,238,987
	Imports.		Excess imports.
	Domestic.	Foreign.	
1851.....	31,715,533	3,63,467	35,349,000
1857.....	47,792,627	9,553,40	57,346,027

The balance increased in favor of France. If we deduct the specie movement the result is as follows for 1857:

Exports.....	\$28,252,146
Less specie.....	6,295,48
Net exports.....	21,956,668
Imports.....	\$47,792,627
Less specie.....	1,887,833
Net imports.....	45,904,794
Excess imports of goods.....	\$13,948,126

The net amount of \$9,553,000 was drawn from England in gold, mostly by the buying up by the Bank of France of the bills, and demanding gold for them at the London bank, an operation which has been practised for some years, and which has not a little puzzled the English financiers, since the apparently irregular action of the French bank in thus forcing a specie current would, it was supposed, inevitably react, but the movement being based upon the regular operation of trade between the United States, France and Great Britain, it was only determining the kind of payment which France would receive. With the North of Europe generally the balance has become far more in favor of the United States, since the effect of gold has been to cause a larger demand for American produce in those countries, while the articles of goods that can be exported to the United States with profit are annually more circumscribed. We may compare the business of certain countries of the North of Europe in 1851 and 1857:

	1851.		1857.	
	U. States exports.	Imports to U. States.	U. States exports.	Imports to U. States.
Russia.....	\$1,511,691	1,392,782	4,528,301	1,435,394
Sweden.....	782,366	967,237	1,400,426	744,112
Hanseatic.....	6,047,447	10,008,364	15,298,210	15,370,936
Holland.....	2,195,169	2,052,716	4,107,857	2,469,762
Belgium.....	2,552,012	2,377,630	5,644,326	5,060,311
Total.....	13,488,685	16,798,721	31,079,140	25,081,215

Thus from an excess of \$3,300,000 of imports from the North of Europe, the trade has turned, under the influence of the gold movement, to an excess of \$6,000,000 in the annual exports, showing the improved demand for American produce which exists in those countries of the North of Europe. Russia particularly promises to become a large customer both directly and indirectly for American produce, since the new Czar has practically recognized the wisdom of removing impediments to trade, and of emancipating not only labor, but laborers from the "protection," which high duties and serfdom have oppressed them with.

The question of how international exchanges are to be kept up between nations that are rivals in the same production is a problem, which can resolve itself only on the principle on which the internal business of

the same country is conducted, viz., by the utmost freedom and competition, which will elicit the fullest capacities of each and all, giving to that country the market whose natural facilities best adapt it to supply it.

HANNIBAL AND ST. JOSEPH RAILROAD.

The cars on the Western Division of the above road are now running from this city to the end of the track beyond Cameron, without interruption, the Platte bridge having been rebuilt and all things restored to their former order. By Mr. E. A. Hitchcock, who reached our city on Thursday evening, over this line, we learn that the cars are now running out eighty-seven miles on the Eastern Division, with a prospect that ten miles more will be completed in a day or two. The distance to be staged is thus being shortened constantly.

Mr. Hitchcock went and came by this road to and from St. Louis, preferring it to the river route on account of the time saved. He met with no inconvenience whatever in making the connections, but found the stage line over the unfinished division well stocked, and in every respect prepared to accommodate passengers. We are pleased to be able to make these announcements, as the period of the year approaches when the travel for a vast section of country must go over this road.—*St. Joseph Gazette*.

By copying such paragraphs as the above, we hope to keep before the minds of our citizens the importance of taking the necessary steps to secure suitable railroad connection with the East. It has been over one year since a railroad from this city, to intersect the Hannibal and St. Joseph Railroad at Cameron, was suggested. What has been done to carry out the project? A survey of the route has been made. There the matter rests, and there it is likely to rest, for ought we know to the contrary. Will our business men and property holders stir themselves? At least make some effort to do something, before it is too late. While we are sitting still, with our hands calmly folded, and patiently waiting—Micawber-like,—for something to "turn up," our rivals are using every exertion in their power, to build up their cities, such as erecting gas-works, building railroads, etc., etc.

Let us have this matter attended to, and the necessary steps taken to secure the speedy building of the Leavenworth and Cameron Railroad.—*Leavenworth Journal*.

HOPE FOR PENSACOLA.

This ancient city, says the *Lynchburg Virginian*, one of the oldest on the American continent, whose history is so interwoven with the first settlement of the gay Spanish cavaliers, and long the rendezvous of those semi-piratical hordes that swept the Gulf of Mexico, and, finally, wrested dominion from the Montezuma's; is—under the influence of that spirit of enterprise which, in a greater or less degree, is animating the whole Southern country—stretching forth her arms Northward, and making improvements which, we trust, will soon result in her material progress and prosperity. We learn that ten miles of the railroad from that city to Montgomery, Alabama, are completed and in running order, and that the connection between these points, will be finished in about eighteen months.

It has also been resolved to build another

railroad from Montgomery to Decatur, Alabama, where the Charleston and Memphis railroad crosses the Tennessee River. The distance between these two points is one hundred and eighty miles, and when they shall be connected by this work, there will be an unbroken line of railway from Pensacola, on the Gulf of Mexico, via Athens, Columbia, Nashville, and Louisville, to the Northern Lakes.

Animated by the stimulus which this magnificent prospect excites, the people of Pensacola are indulging high hopes of the future importance of their city in a commercial point of view; and believe that it will be the great entrepot of the commerce of the Gulf.

This opinion is based on the availability of that city for the finest cotton and agricultural region of the South; on its harbor, which they contend, is the best on the Gulf; and upon its natural healthiness. Added to all these, is the fact that a road is in course of construction from Jacksonville, on the St. John's river, by the way of Tallahassee, the capital of Florida, to Pensacola. This will unite the latter city with the Atlantic coast, and give her a better outlet in that direction also.

In common with every true friend of the South, we watch these evidences of her growth and development, with a lively interest—and regard them as the means by which her commercial independence is to be effected; whilst, at the same time, she may be bound in the bonds of closer and more cordial amity with the whole country.

But one thing more is needed, and that is to turn our attention to manufacturing. That we are destined in a great part to be an agricultural people, we can not gainsay; but this circumstance alone places us at an immense advantage over our Northern neighbors who are depended upon us for their raw products, and are, therefore, compelled to import the staples of which their manufactures are fabricated.

THE RED RIVER OF THE NORTH.

The following glowing description of that paradise of the West, the Red River of the North, from the pen of Prof. Hind, is true to the life, and we gladly give it an insertion. He says:

Of the valley of Red River I find it impossible to speak in any other terms than those which may express astonishment and admiration.

The description which I had read previous to my arrival there, certainly did not, in any way, prepare me for the magnificent country at present occupied and controlled by those whose interests, no one seeks to deny, have been opposed to settlement or communication with what may be termed the outer world.

I entirely concur in the brief but expressive description given to me by an English settler on the Assiniboin, that the valley of Red River, including a portion belonging to its grand affluent, is a paradise of fertility.

The opinions expressed at the settlement by different individuals on the soil, climate, and natural productions of the country, are often of a very opposite character; I found invariably that opinions and descriptions were remarkably affected by the relation which the individual bore to the honorable Hudson's Bay Company.

The character of the soil in Assiniboin, with the limits of the ancient lake ridges,

can not be surpassed. It is a rich, black, mold, ten or twenty inches deep, reposing on a lightish colored alluvial clay about four feet deep, which again rests upon lucustrine or drift clay to the level of the water, in all the rivers and creeks inspected.

I frequently examined the soil some miles distant from the rivers along my line of route, as shown on the map, and invariably found the prairie portion to exhibit a uniform fertility.

The area occupied by fertile prairies I visited and saw, certainly exceeds 1,500,000 acres, and, as will appear from an inspection of the map of Minnesota, the greater portion of the rich and available prairie land in the valley of the Red River, lies within British territory, while the valley of the Assiniboin is wholly within it.

As an agricultural country, I have no hesitation in expressing the strongest conviction that it will one day rank among the most distinguished.

The present state of society and the condition of the people in the settlements, is far from being a pleasing or encouraging subject.

The European and Canadian element has been gradually diminishing for years, and the half-breed population is apparently drawing closer to the habits and tastes of their Indian ancestry. That agriculture and all the simpler arts have been discouraged, is but too apparent. The interests of the fur trade are necessarily opposed to the centralization and settlement of the half-breed and Indian hunters, and it is every where evidenced that these interests have been so held at a great sacrifice of means, and by the practice of a far seeing and skilful policy. Red River has been settled for forty years, and now contains a population of 7,000 souls; yet, no single branch of industry, common even in the thinly settled parts of Canada, is practiced there.

Whatever efforts were made in time past, and they have been many, they have terminated in failure, and it is difficult to resist the impression that these failures were designed by some one in authority. Such artifices appear to have been thought necessary when the controlling authorities were weak, and, indeed, almost powerless, in the face of a strong but irresolute and uneducated people. The valley of the Red River is capable of supplying all the necessities of life, with the exception of iron, for some years to come. The most important want is fuel, but there is much probability that on the Upper Assiniboin and the Little Souris River, one of its affluents, tertiary coal or lignite, will be found in available quantities.—*St. Anthony Express*.

REPUDIATION REPUDIATED.

There is one issue settled by the election on Tuesday, which, although presented for the time only as of local interest, is in fact hardly second in importance to any of the questions dividing parties in the State. We refer to the "Repudiation" doctrine set up in Allegany county, and made the basis of a distinct organization. The city of Pittsburg and the county of Allegany subscribed some years ago, as did our own city and districts, to the stocks of various railroad companies, and issued therefor their bonds, pledging without reserve the municipal "faith and property" for the payment of principal and interest. The bonds thus issued were placed in possession of the railroad companies, and by them

negotiated, and are now held chiefly in this city and neighborhood, and to some extent in Europe.

For two years the railroad companies paid the interest on the bonds from their construction funds, thus standing between the city and county on the one side, and the bondholders on the other. But, within the past year the construction funds were exhausted and the work of the various companies stopped, so that the city and county were required to pay the interest; as, in fact, they should have done from the start, upon their own obligations. To this demand an opposition was raised, which has grown into the proportions of an organized Repudiation party, the principles of which is to ignore the whole debt, and swindle the innocent holders of the bonds, who bought them in good faith in the open market, at whatever market price. Meanwhile the railroads, so far as constructed, had added vastly to the value of property in Allegany county and very sensibly to its trade.

To the honor of a number of its citizens this attempt, though hardly checked for a time, was met at the polls on Tuesday last. The Repudiationists had nominated candidates for every office, from Congressman to Constable, pledged to nothing but resistance to taxation, thus inviting support from the tax-payer, who might, through the secrecy of the ballot box, evade his share of the municipal debts. Money was freely subscribed to establish and maintain a Repudiation newspaper, a few heavy property holders deeming it cheaper to spend thus, than to submit to rightful taxation. The scheme, however, has failed, and a majority of the people of Allegany county and of Pittsburg have repudiated Repudiation and all its abettors.—*Phil. Inq.*

IMPORTANT RAILROAD DECISION IN THE U. S. CIRCUIT COURT.

BY JUDGE M'LEAN.

The Hillsborough and Cincinnati Railroad Shares in Litigation.

WM. STURGES *vs.* STETSON.—This action is brought on a promissory note, for \$24,000, made to plaintiff by defendant, dated 4th of February, 1853, and payable on demand.

The questions before the Court are raised by the ninth plea, which states that the Hillsborough and Cincinnati Railroad Company, on the 31st of January, 1853, was engaged in the construction of its line of road from Cincinnati to the Ohio River, at or opposite Parkersburg, in Virginia; that its capital stock, under various acts of the Legislature, was five millions of dollars, and was divided into shares of fifty dollars each; that the subscriptions of stock were regular under the control of the Board of Directors, for the time being, yet, that neither the Board of Directors nor the Company had power, by their charter, or by the laws of the land, to issue and dispose of stock at less than fifty dollars per share.

That the plaintiff, being a dealer in railroad stocks, entered into an unlawful scheme and device with the Board of Directors, that they should execute to him a bond for \$750,000, payable in January, 1858, without interest, and within four years from date, convertible into fifteen thousand shares of stocks, at fifty dollars each; and that the said bonds should be sold and delivered to the plaintiff for \$321,677, payable on the call of the Company; which sum was less by \$228,333 than the amount of the shares purchased by him. And the plea further averred that the plaintiff, on the 4th of February, 1853, still holding six hundred shares of the above purchased stock, of which he represented himself to be the lawful holder, induced the defendant to purchase the same, and as a consideration for which he gave the promissory note on which the action is founded. And the power of the Directors to issue the stock by the charter, or under the laws of the State, at less than fifty dollars for each share, is denied.

To the special plea a general demurrer was filed.

In the original act of incorporation, the capital stock was limited to three hundred thousand dollars, to be divided into shares of fifty dollars each. The sum of one hundred and fifty thousand dollars was required to be subscribed before the structure of the road should be commenced. In a subsequent act this sum was reduced to one hundred thousand dollars.

The twelfth section authorizes the Directors to require payment of capital stock subscribed by installments, as they shall think fit; and if the installment shall remain unpaid for sixty days after the time required, the Board may collect the same by suit, or shall have power to sell the stock at public auction.

By the fifteenth section the Directors authorized to mortgage the capital stock to secure the payment of money borrowed.

The act of 1849 increased the capital stock to nine hundred thousand dollars; and the amendatory act of 1851 increased it to five millions of dollars. By a special act of 5th of February, 1851, the Company was authorized to sell its bonds, issued for loans, and its notes and certificates, payable in money or property received as donations, or in payment of subscriptions to its stock, above or below par.

By the fifth section of the original act the affairs of the Company were vested in seven Directors, a majority of whom were authorized to act; and by the sixth section it is declared that the Directors may determine "the times and terms of payment of stock."

There appears to be nothing in the various legislative acts that constitute the charter of this Company which is not common to other railroad companies chartered in this State.

In the consideration of this case, it is necessary to ascertain the nature of the contract between the Directors and the plaintiff. Was there a sale, or a subscription of stock, or both? When the parties came together, with a view to this transaction, there is no pretense to say that the fifteen thousand shares were stock. They constituted a part of the capital stock, as provided in the charter, but in no other sense were they stock. The corporate powers of the Company were conferred for the express purpose of creating stock as a means of constructing the railroad. As well might the route for the road designated be called a railroad, as to call the corporate means of creating the stock, stock. In a legal point of view, it is important to call things by their right names. This is especially necessary when the effect of the exercise of corporate powers is to be determined.

Stock can be created only by contract, whether it be in the simple form of a subscription, or in any other mode. There must be an agreement to take the stock, and nothing short of this can create it. This imports to the stock the quality of property, which before it did not possess. It is called capital stock in the charter, because the corporate capacity to create it is given. The term stock as used in the charter, before it is taken by subscription, means nothing more than a power in the Directors to receive subscription for stock.

The plea sufficiently shows that there was no sale of stock to the plaintiff, which has been previously issued, but an attempt to create the stock and sell it at the same time as one transaction. And it appears that the discount of nearly one-third of the shares purchased, was a part of the contract of subscription; and this presents the great question in the case, whether the Directors had power to issue the stock for less than its par value.

If it is not admitted in the argument, it is not controverted, that the Commissioners who, before the organization of the Company, received subscriptions of shares, had no power to receive them for less than the amount stated in the charter. But it is said that the subscription of the plaintiff was not received by the Commissioners, but by the Board of Directors, who exercised all the powers of the corporation, and among others, the power of sale over its property; that the sixth section of the charter gives them express power over the stock, "to determine the time and terms of payment."

As capital stock is not property until it shall be subscribed for, the power given to the Directors by the charter, to sell the property of the Company, does not apply to the disposition of capital stock. And it seems to be clear that the power to determine the time and terms of payment of subscriptions of stock can have no reference to its price. The charter declares the shares of the capital stock shall each be fifty dollars; and it would be contrary to all known rules of construction to say that a provision which applies only to the payment of stock subscribed, shall be so construed as to repeal the provision that fixes the value of each share.

There may be many instances where land is purchased for a depot, or for other purposes connected with the road, or where work has been done on the road, or rolling stock furnished for it, a subscription for stock may be given by the Directors in payment. But whether land, labor, property, or money be received in payment, the principle is the same. The Directors may regulate the time and terms of payment, but they have no power over the price of each share.

In declaring that the capital stock should be divided into shares of fifty dollars each, the law was designed to give the same permanency to the limitation of the shares as to the limitation of the capital stock. A subscription procured of fifteen thousand shares, amounting to the sum of seven hundred and fifty thousand dollars, with the understanding that it should be discharged on the payment of about one-third less, was a fraud upon the law and upon the stockholders. The term fraud is here used in no other sense than as an act done without the authority of the law and against the provisions of the charter, and this epithet legally applies, however innocently the act may have been done by the Directors.

In regard to the price of the shares, the Directors have no greater power over it than the Commissioners had. They were both the instruments of the law, and were alike bound by its provisions. If power had been given to either to exercise a discretion so vital to the

success of the scheme as to vary the price of shares, it would have destroyed all confidence in the enterprise. The plaintiff seemed to have been convinced of this from the plan adopted to receive from the Company the first bond for seven hundred and fifty thousand dollars, to give to the act the appearance of fairness on the books of the Company. It is essential to the success of any enterprise which involves the expenditure of money that the contributors should be placed upon an equal footing in regard to the money paid. In this case the plaintiff received in stock two hundred and twenty-eight thousand three hundred and thirty-three dollars more than he paid for. This was a fraud on the stockholders who had paid in full for their shares.

It is said the Directors had power to secure the payment of loans, by mortgages on capital stock. This is admitted. In the sixteenth section of the first act, it is provided that to secure the payment of money and the interest thereon borrowed, "the Directors may pledge, by mortgage or otherwise, their entire road fixtures and equipments, with the income and resources thereof, together with the capital stock."

What was meant by the capital stock in this provision? Does it refer to the stock named in the charter, and for which no subscription has been made? Such stock is a legal fiction. It is not in account, and, as such, can not be a subject of mortgage. What security under the mortgage could it afford? It is, at best, nothing more than a right to subscribe for stock, which is common to all persons; and every one who does subscribe confers a favor on the Company. The power given to the Directors to pledge the capital stock was, undoubtedly, intended to cover the capital stock, which was owned by the stockholders, and was property that might be mortgaged at the time.

It is admitted that stock may be sold on execution after judgment against a stockholder, under the statute, or it may be sold at auction, under the charter, for default of payment, at less than its nominal value. In either case, the stock being property may be sold, as other personal property, for what it may bring. On a sale at auction, or an execution, nothing is sold but the interest of the stockholder; and the purchaser acquires only his right. If the stock has been paid for in part only, the new owner must pay the installments required, under the rules of the Company; and if he fail to do so, the stock may be again sold. The same rule of procedure applies where the stock is sold on execution. In neither case is it important that the stock should sell for the amount paid on it. If it sell for more, it is the gain of the delinquent stockholder; if for less, it is his loss. But by the sale, the interest of the other stockholders is not affected. If the stock has been paid for in full, and it sell for half the amount so paid, the sale is valid, and the interests of the other stockholders remain unaffected. The stock, like other property, being subject to the claims of creditors, is liable to loss on forced sales.

But such a procedure is altogether different in principle from the act of taking subscriptions of stock.

It is said there is nothing in the charter which prohibits the Directors from taking subscriptions of stock for less than fifty dollars a share.

No such provision was necessary. The duties of the Directors are plainly pointed out in the charter, and as their powers were wholly derived from that instrument, it was not necessary to prohibit them from doing that which the charter did not authorize them to do. The charter fixed the rates at which the shares should be subscribed. This is matter of law, and is no more subject to the discretion of the Directors, than it was to the discretion of the Commissioners, who first received subscriptions.

From the authority given to the Directors to sell "notes, bonds, scrip and certificates for the payment of money or property, which the Company had previously received as donations or in payment of subscriptions to the capital stock," above or below par, an argument is drawn, that stock may be disposed of to subscribers for less than fifty dollars a share. It appears to me the provision authorizes an inference in conflict with the one drawn. If bonds or other instruments for the payment of money be transferred at less than their face, with legal interest on the entire sum, in payment for the money loaned, it would be usurious, and this was the reason for the above provision. Without it, the sale of the bonds, &c., would have been illegal.

A certificate of stock was issued to the plaintiff for fifteen thousand shares, amounting to the sum of seven hundred and fifty thousand dollars, of which only five hundred, twenty-one thousand six hundred and seventy-seven dollars were paid, which was less for the shares than the price fixed by the charter, by two hundred and twenty-eight thousand three hundred and three dollars. This sum, distributed among the shareholders at the time of the transaction, will show the loss they sustained. And if this be a correct construction of the powers of the Directors, they may continue to reduce the price of stock, at every subsequent subscription, down to five or ten dollars a share, distributing the loss upon prior stockholders. The last subscribers, at whatever rate, would stand on an equality as to future dividends, and in all other respects. With the previous subscribers for stock, who had paid in full for their shares. The injustice of such a scheme requires no demonstration. It is in conflict with the charter.

Such has been the depression of railroad enterprises in this country, that I can readily conceive many stockholders who have largely subscribed and paid for stock, might be willing to sacrifice their stock to complete the road; and such a high and patriotic motive, prompted by considerations of the public interests, is not to be condemned. But such an arrangement could only be carried out legally, if at all, by a voluntary

acquiescence, in a surrender of a part or the whole of his stock, by every stockholder.

From the high character of the individuals who compose the Company, I feel bound to say that, in my judgment, their error has arisen from a misconception of their corporate powers. But the principles of law apply to the act and not to the motive, where no moral turpitude is involved. I think the subscription of the plaintiff as made, was void.

Whatever right the plaintiff may have against the defendant arises from the sale to him of the six hundred shares of stock in controversy. The stock was to be transferred to the defendant on the payment of the note on which this suit is brought.

Under the demurrer, any defect in the plea is open to the objection of the plaintiff. And he takes exception to the averment of value in the plea, as it is laid under a verdict, and is, therefore, not material.

The averment in the plea is, that the Directors issued, or caused to be issued to said plaintiff, certificates for sale fifteen thousand shares of said Company's capital stock, at a fifty dollars a share: that is to say, at par value, dollar for dollar.

It is difficult to find, on a nice point of pleading, uniformity of decision. It is said that the office of a verdict is to show that the party does not undertake to prove the precise facts alleged. But if the averment be material, he is obliged to prove it, though it be laid under a verdict. Where the declaration stated an usurious agreement, on the 14th of the month, to forbear and give day for payment for a certain period, but it was proved that the money was not advanced till the 15th, the plaintiff was non-suited; it being held by Lord Mansfield at the trial, and afterward by the Court in banc, that the day from whence the forbearance took place was material, though laid under a verdict. Stephens' pl. 594, *Grinwood vs. Barritt*, 6 Term 413. *Hardy vs. Cathcart*; 5 Taunt. 2. Mr. Stephens says in his pleadings, 294, all material facts must be truly laid, as a verdict, in such a case can give no help. There is a class of facts, not going to the substance of the action, which may become material, by being connected with the material allegations, and must be proved; but such facts, when laid under a verdict, need not be proved. A verdict will not avoid a variance, or dispense with the exact proof in an allegation of a material matter.

It is admitted, when time is material, and an impossible time is alleged, the pleading is demurrable. But where a material averment is made under a verdict, it does not dispense with the exact proof of the fact laid. The objection is, that the averment of value in the plea, as to the stock, is material, but being laid under a verdict, it is not necessary to prove it on the trial, and therefore it is not material. If the averment be material and it is laid under a verdict, still it must be proved, as laid, according to the authorities, and, consequently, on demurrer, it must be taken as true. As before remarked, there are many things connected with the essential parts of a case, which, if laid without a verdict, must be proved, but which need not be proved if laid with a verdict.

This action is in the nature of a bill in equity for the specific execution of a contract, and the defendant may avail himself of any matter in defense which goes to impair or make void the contract.

In this view of the case it is proper to refer to the averments of the ninth plea, which the demurrer admits to be true.

It is charged in that plea that the plaintiff entered into a corrupt agreement, through which he obtained the certificate for fifteen thousand shares of stock from the Company, at a sum near one-third less than the price per share fixed by the charter: and that to induce the defendant to subscribe for the six hundred shares, he represented himself to be the lawful owner of such stock.

Whatever doubts may arise from the conflicting decisions in the Courts of England and of the United States in regard to fraud, and whether certain transactions are fraudulent per se, or are only evidence of fraud, being void or voidable, there would seem to be little doubt of the character of the case as made out in the plea, and which the demurrer admits. The allegations of fraudulent acts by the plaintiff in the procurement of the stock are coupled with a want of power in the Directors so to issue it.

This case is said to be similar to that of Schuyler's. On some points they are alike; on others they differ. In Schuyler's case the stock of the railroad had all been issued. The certificate of stock was a forgery, signed by the agent of the Company; and transferred to the bank on which the money was loaned. The Court held that the assignee of the certificate took only the equitable right of the assignor, as a legal transfer could only be made on the books of the Company; and as the certificate was forged, there was no equity in the holder.

The subscription of stock by plaintiff for less than the price of the shares fixed in the charter, was void, as against law and the power of the Directors. But the stock procured by the plaintiff was open for subscription, and from the bond executed to him by the Company for seven hundred and fifty thousand dollars, convertible into stock, and which he converted into stock, the books of the Company represented a fair and legal transaction; and in the hands of an innocent holder of the stock so issued, the Company would, I suppose, be held liable. While the law clothes a corporation with the powers of an individual to make contracts, it gives to it no immunity to practice frauds upon innocent persons.

But the defendant has never received the stock assigned to him by the plaintiff. It was assigned to him, as stated in the plea, and left in the Trust Company to be delivered on the payment of the note sued on. But on a discovery of the frauds alleged in the plea, he refused to

pay the note, and the question now is, whether he shall be compelled to carry out the contract for the stock.

If it be admitted that defendant on application to the Company or by legal coercion, could obtain a recognition of his right to the six hundred shares of the stock on the books of the Company, is he bound to take such a course? If, on a full knowledge of the facts set up in his plea, the defendant takes the stock, he holds it subject to the right of the Stockholders prior to the subscription of the plaintiff, to have it reduced to the charter value of the shares. This would take from him nearly one-third of his shares.

The contract of the plaintiff is executory. He occupies a point which gives him the option to pay the money and carry out the contract, or to stand on the matters in bar, which he has set up in his plea. He has taken the latter ground, and it is for the Court to say whether it is maintainable.

This stock was purchased from the plaintiff by the defendant at less than its par value; but a stockholder may sell his stock at any price he may think proper. Such sale affects no one's interest but his own. In this respect it is like all other property over which the owner may exercise his discretion.

The defendant seems to have done nothing to preclude him from the defense set up in his plea which stands admitted by the demurrer, and which, in my judgment, is a sufficient answer to the action. The demurrer is overruled.

Samuel Fosdick vs. Wm. Sturges—This action is brought to recover the sum of twenty-four thousand dollars, which was paid by the plaintiff to the defendant for stock in the Hillsborough and Cincinnati Railroad Company on the ground of fraud.

The declaration states that on the 3d of January, 1853, the Hillsborough and Cincinnati Railroad Company were engaged in extending and maintaining their line of road to the Ohio river, at or nearly opposite Parkersburg, in Virginia; that the issue and disposal of the stock were vested in the Directors for the time being; that Sturges, the defendant, entered into an unlawful scheme and device with the Board of Directors, who issued a bond for seven hundred and fifty thousand dollars, convertible into stock at par, with the understanding that the bond should be discharged by another bond for the sum of five hundred, twenty-one thousand six hundred and seventy-seven (\$51,677) dollars; that Sturges was elected to convert the bond of the Directors into stock, and that they issued to him certificates for fifteen thousand shares of stock, at fifty dollars per share, amounting to the sum of seven hundred and fifty thousand dollars; that in payment for such stock as had previously been agreed upon, he executed a bond to the Company for five hundred, twenty-one thousand six hundred and seventy-seven dollars, payable when called for; leaving the sum of two hundred and twenty-eight thousand, three hundred and twenty-three dollars less than the par value of the stock; that the defendant represented himself to be the lawful holder of the stock so issued to him, and he proposed to sell to the plaintiff six hundred shares of the stock at forty dollars per share, amounting to the sum of twenty-four thousand dollars. And that the plaintiff believing he was the lawful holder of the stock, purchased from him the six hundred shares, having no notice to the contrary.

The declaration further avers that Sturges was not the lawful holder of the stock, his subscription for the same being void, as having been made in violation of the charter, for a less price than fifty dollars per share, as fixed by the charter; and the declaration also alleges that Fosdick received from Sturges an assignment of the six hundred shares of stock, which, on application, were transferred to him on the books of the Company, and a new certificate issued to him, which he brings into court to be disposed of according to law.

To this count in the declaration a demurrer was filed. There are other counts in the declaration, but they are not before the court on demurrer.

The contract declared on has been executed. Sturges assigned to Fosdick the six hundred shares of stock, and he paid for them twenty-four thousand dollars; and on the presentation of the assignment to the Company, the stock was regularly transferred to him on its books. He had not, it seems, from the count demurred to, discovered the alleged frauds until after he had purchased the stock, and it had been regularly transferred to him on the books of the Company.

In the case of *Sturges vs. Stetson*, at the present term, it was held that the Directors of the Company had no power to receive subscriptions for stock at a less price, per share, than was fixed in the charter; and, consequently, that notes given for stock, so obtained, could not be enforced. Such a subscription was held to be, not only in express violation of the charter, but a fraud upon prior stockholders. Sturges, though holding by certificate his fifteen thousand shares of stock, regularly, to all appearance, entered upon the books of the Company, was liable on the application to a Court of Chancery, by a prior stockholder, to have his number of shares reduced to their par value.

Fosdick, on the demurrer, must be taken to be a bona fide purchaser of the six hundred shares of stock without notice. The proceedings on the books of the Company, in regard to the subscription of this stock by Sturges, can give rise to no suspicion of unfairness. The bond for seven hundred and fifty thousand dollars to be converted into stock, at the pleasure of the holder, in a limited time, was not out of the ordinary mode of business; and the issuing of the fifteen thousand shares on the surrender of the bond, could awaken no inquiry. The entire transaction in regard to the subscription of this stock was apparently and clearly within the corporate powers of the Company. Under such circumstances it appears to me that a bona fide purchaser of the stock could enforce a transfer of it on the books of the Company.

The agencies of a corporation have no license for the commission of wrongs. Their powers are limited, but when they circumvent and mislead to his injury, an innocent individual, without knowledge to awaken his suspicion, the corporation is liable.

But the right to the six hundred shares of stock by Fosdick was admitted by the Directors, and a regular transfer of it to him was entered on their books. And this, it is said, was a consummation of his right, by which he acquired all he contracted for, and all that he expected to receive.

It is true the prospective completion and business of the road have not been realized. But this is a disappointment common to all persons who have engaged in such enterprises. They have given their time and money to objects which have advanced beyond all other improvements, the agricultural, the commercial, and the social interest of the country; but they have generally realized heavy pecuniary losses. But these constitute no ground for the rescission of contracts, or of equitable relief, unless fraud be established.

In the illegal issue of the stock, Sturges and the Company participated, and they may be equally responsible to a bona fide purchaser. But if it be admitted that the Company, under the circumstances, may be liable to Fosdick, does it follow that he may not exercise his own discretion in regard to the remedy? This seems to be a matter for the determination of the parties rather than the Court.

The frauds charged against Sturges consist in his participation in the fraudulent issue of the stock, declaring that it had been lawfully issued; in his false and fraudulent representations to Fosdick that he was the lawful owner of the stock; through which false and fraudulent assurances Fosdick was induced to purchase the six hundred shares. These averments of fraud are admitted by the demurrer, and must be taken as true.

But if the frauds alleged do not materially affect the rights of the plaintiff, he is not entitled to a remedy against the Company or Sturges. Of the fifteen thousand shares of stock subscribed by Sturges at the par value, he paid for only ten thousand four hundred and thirty-three and a half shares; leaving four thousand five hundred and sixty-six and one-half shares, for which he paid nothing. These amount much nearer to the one-third than the one-fourth of the fifteen thousand shares subscribed, and, at the par value of these shares, they amounted to the sum of two hundred and twenty-eight thousand six hundred and seventy-seven dollars.

It was held in *Stetson's* case that although the Directors, in receiving the subscriptions, shares of stock were bound by the price per share fixed in the charter; yet, stock, when once subscribed became property, and could be sold at any price fairly agreed upon, and that the assignment would convey the shares in full. The six hundred shares of stock were purchased by Fosdick at forty dollars per share, but each share was transferred at its par value of fifty dollars. On the payment of twenty-four thousand dollars, Fosdick received in stock thirty thousand dollars, and any sum short of that amount will be so much less than he purchased and paid for.

There can be no question that any stockholder, prior to the subscription of Sturges, could, by legal coercion, reduce the stock subscribed by him to the number of shares he paid for at their par value. And the same principle would apply to all the assignees of the stock, by Sturges, who had notice. This rule applied to Fosdick would reduce his stock some one hundred and seventy-five shares.

But if the rule should not apply to Fosdick, he being a bona fide purchaser, still the shares not paid for by Sturges must be distributed and apportioned among the prior stockholders, lessening the stock in value near one quarter of a million of dollars.

In whatever light this decision may be considered it appears to me there can be no escape from the conclusion that the frauds complained of in the declaration are so material in their effect upon the rights of the plaintiff as to entitle him to a rescission of the contract for the purchase of the six hundred shares of stock, and an action against Sturges for the money paid. The frauds, as alleged, are admitted to be true.

New issues may be raised, and a new aspect given to the case in its future progress; but, as it now stands on the demurrer, with all the averments of the declaration admitted to be true, I feel bound to overrule the demurrer.

Superior Court of New York.

In re *Wm. R. Higbee*, respondent, agt. The New York and Harlem Railroad Company.

This case came up on appeal from a judgment entered on the report of a referee. The action was brought on a note taken under the following state of facts: Stewart & Baylis, the assignees to the plaintiff, contracted with the defendants to grade the track of the railroad at certain prices payable monthly, on the estimate of the engineer. Nine of these estimates had been paid at the office of R. & G. L. Schuyler, the defendants having their office in a room rented from that firm, and in the same building. On the representation of the claim for the tenth estimate, Baylis was told by the Schuylers' clerk that they had not money enough, and proposed to pay \$3,126 70 in cash and to give the note of R. & G. L. Schuyler at 30 days for the balance, which was \$3,500. Baylis said if the Company had not the money he would take a note with interest added. The note was given, and a receipt signed by Stewart & Baylis for \$6,626 70 was taken. The note was not paid, and the holders offered to surrender it to the defendants.

The defendants set up that the claim was paid by the note, and show that at its date the Schuylers were in,

VIRGINIA RAILROAD DECISION.—Some of the local papers report that in the Circuit Court of Bedford county, Va., lately, in the case of Steptoe vs. the Virginia and Tennessee Railroad Company, where the plaintiff sued for damages sustained by him from the trespass of cattle on his wheat field, through the neglect of defendants to keep the cattle guards on their road in repairs; the Judge decided that the company was neither obliged to construct cattle guards nor keep them in repair. Notwithstanding the instructions of the Court, the jury brought in a verdict for the plaintiff of \$120, which verdict was set aside as contrary to the instructions from the bench.

COUNCIL BLUFFS AND ST. JOSEPH R. R.

We understand that the citizens along the route of this road in Missouri, are wide awake upon this subject—that several large and enthusiastic meetings have been held in the counties through which it passes, and a determination is universally manifested to have the work pushed forward as fast as possible, from St. Joseph to the State line. We are informed that the only obstacle in the way of its completion to this city, in the minds of the people of Missouri, is a fear that our citizens will not respond to the demands made upon them, and complete this end of the road to the State line.

We would say to our friends in Missouri, "Be of good cheer and fear not." If you beat us to the State line, you will have to exhibit more energy and go-aheadativeness, than is generally manifested by the citizens of Missouri. It will be five years next February, since you obtained a charter, and the State loaned its credit to your road to the amount of \$700,000; yet, strange to say, you have not stuck a spade in the ground, with a view of constructing the road. Let the State of Iowa but loan its credit in half that sum to this end of the route, and twelve months will not roll round before you will see the "Iron Horse" pawing and snorting at the State line, anxious to get over and take a run down to St. Joseph. But without the aid of the State, we will build our end of the road, and will be at the State line ready to pass over, so soon as you lay down the rails.

We understand that the Company organized for the construction of this end of the route, are about effecting a loan of several thousand dollars in the East, and we have no doubt, will commence active operation within the next twenty days.

In the mean time, it is very desirable that our citizens should do all in their power, to aid the Company, by adding largely to the subscription of stock. Let every farmer in the country take a little stock in the road. It will be only money lent to be repaid with *usury* in a short time. The money will be expended among us, by the laborers who receive it. Farmers will get it back again for their pork and corn, and while they furnish the means to build the road, they will at the same time create a market for their surplus produce.

The objections usually urged against taking stock in Railroad Companies, is, that by doing so we are only aiding a foreign monopoly, is obviated in this case. Our own citizens are the stockholders—our own citizens are the officers of the Company. It is decidedly a home institution—an institution in which every citizen may and *should* be interested—an institution which depends for its support and success, upon the energy and enterprise of our citizens. We know that when they become fully awake to their own interests, that the work must go ahead—that the road will be built. The building of the road will greatly enhance the value of all kinds of property in the country through which it passes, and for every dollar put into the road, the farmer will get two back in the enhanced value of his farm, and the advantages of a ready and sure market. Farmers, take a candid and careful view of the importance to you, of the construction of this road, and be prepared to take as much stock as possible. An agent for the Company will call upon you in a few days. Have your

minds made up to take stock—it is your interest to do so—look to your *own* interests.—*Weekly Bugle.*

The Chicago Press says that Messrs. R. S. Thomas and B. S. Prettyman, two of the Directors of the Illinois River Railroad, have returned from New York with a contract concluded with one of the most reliable capitalists of that city, for all the rails, chairs, spikes, frogs and switches that may be necessary for the completion of the Illinois River Railroad from the junction of the Peoria and Hannibal Railroad, in Peoria county, to Jacksonville, in Morgan county, a distance of 75 miles.

THE BALTIMORE AND POTOMAC RAILROAD. Rob. Bowie, Esq., of Prince George's county, agent for obtaining subscriptions to the Baltimore and Potomac Railroad, reports that since he commenced his canvass, about four weeks ago, he has obtained subscriptions for the enterprise of 1,000 shares, amounting to \$50,000, the sum required by the charter for the formation of the company. The commissioners, therefore, will meet at Upper Marlborough on the 3d of November, for the purpose of calling a meeting of the stockholders to elect a Board of Directors.

The New London Star states that the Amherst and Belchertown Railroad was sold on the 14th, the Mortgage to the First Bondholders having been foreclosed. There were two mortgages on the road, one on the rolling stock, etc., for \$25,000, and one on the road for \$60,000—making in all \$85,000. That on the road sold for \$30,000, and on the stock for \$12,500—making in all \$42,500. The road is twenty miles long, running from Palmer to Amherst, in continuation of the N. L. W. P. Railroad, and cost originally about \$225,000. It was purchased by the bondholders.

The receipts and expenses of the Scioto and Hocking Valley Railroad for the month of September, were as follows:

Receipts.....	\$8,043 83
Expenses.....	4,186 76
Net earnings.....	\$3,857 07

The following is the statement of the earnings of the Buffalo and State Line Railroad Company for the months of September, 1857, and 1858:

	Passengers.	Freight.	Other sources.	Total.
1857....	\$57,954 56	\$28,750 16	\$1,150 00	\$37,814 72
1858....	51,745 11	34,240 38	1,160 39	87,146 28
Inc.....		\$5,300 12	\$10 89	
Dec....	\$6,209 45			\$98 44

The expenses will show considerable decrease compared with last year.

The following is the Treasurer's statement of the Ohio and Mississippi Road for the month of September, 1858. This statement shows an increase of \$25,217 28 over the corresponding month of last year:

	1858.	1857.	Increase.	Decrease.
Passengers.....	\$103,591 38	\$110,661 00		\$7,069 62
Freight.....	72,333 50	41,467 42	\$30,866 08	
Express.....	3,155 00	3,035 00		
Mail.....	6,576 41	5,164 59	1,420 82	
	\$185,585 29	\$160,348 01	\$33,236 90	\$7,069 62
Increase.....			\$25,217 28	

EDWARD J. MANSFIELD, C. E.

OFFERS his services on Railroads, Turnpikes, or Civil Construction. He has been employed for several years in Ohio, and Tennessee, as assistant Engineer.

Refer to—
E. D. Mansfield, } Cincinnati.
T. Wrightson, }
A. Kennedy, Iowa.
C. Davies, New York.

oct.7-4t.

V ENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. J. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 167* JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

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Consulting Engineer.
84 Broadway, N. Y.

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July 14, 1857.

js23-1m

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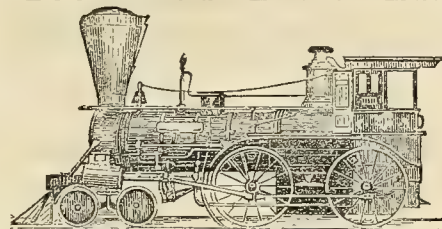
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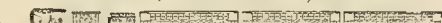
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7.30 A. M.—Dayton, Lima and Sandusky Mail Express.

4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

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7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; a Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

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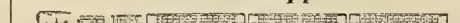
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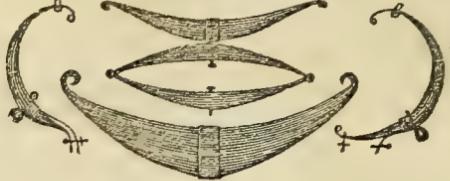
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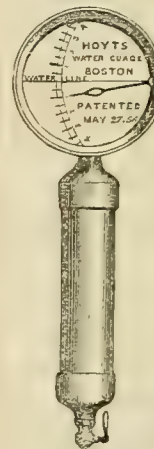
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Railroad Record.

E.D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....NOV. 4, 1858.

Railroad Record

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ILLINOIS CENTRAL RAILROAD.

We have received the statement of the Master of Machinery of this road for the month of September.

The total number of miles run by the engines during the month was 186,569, at a total cost of \$32,064 31, composed of the following items:

Wages of Engineers and Firemen.....	\$7,142 72
Repairs.....	6,879 03
Waste, Tallow and Oil.....	1,549 35
Cleaning, etc.....	1,113 53
Wood and Coal.....	15,419 68

Total.....\$32,064 31

making the total cost per mile \$17 13.

The above report included all expenditures of rebuilding, superintending, teaming, etc., relating to repairs.

Wood is rated at \$4 per cord. Coal at \$2 per ton loaded on tenders.

THE POPULATION OF THE GLOBE—WHAT IS IT?

This is a curious problem, and an exact solution can not be aimed at; for it is impossible to count each individual on the globe at the same time. We may, however, arrive at an approximation quite near the truth. To do this, we must not set down and estimate in one country for all other countries; but we must take (as we fortunately possess), the last censuses of all the large and populous countries—such as Europe, the United States and China; then we must take most authentic information upon other well known countries, such as British India, Persia, Mexico, &c., &c.; and lastly, we must estimate the population of such countries as Africa, by comparing the observation of travelers on the density of population with other countries. In this way we shall arrive at nearly the truth. This problem is suggested to our mind by the following paragraph, which is going the round of the newspapers:

A Professor of the Berlin University has been making curious researches respecting the population of the globe. The following is the result: "Population of Europe, 272,000,000; of Asia, 720,000,000; of America, 200,000,000; of Africa, 89,000,000; of Australia, 2,000,000. Total population of the globe, 1,283,000,000. The average number of deaths per annum, in certain places where records are kept, is about one to every forty inhabitants.

If the "Professor of the Berlin University" ever did make such an estimate as this, it argues great ignorance of America in the Universities of Germany. There ought not to be a boy in the High Schools, who does not know that America does not contain *half* of two hundred millions, or anything like it!

In order that we may arrive at something like the truth, we shall give the results of estimates made by the most competent statisticians, including the Berlin Professor, for the whole earth:

MALTE BRUN (the geographer), gives.....	633,000,000
BARTH (a French statistician).....	737,000,000
HORN (German).....	938,421,000
M'GREGOR (English) on the basis of the Atlas nac Von Weimer.....	812,533,742
The "Berlin Professor".....	1,283,742,000

There is certainly some difference between Malte Brun, M'Gregor, and the Berlin Professor!

Most of these great differences are founded 1. On the degree of credibility given to the Chinese Emperor; 2. On ignorance of America; and 3. On ignorance of Africa. But our recent travelers and geographical discoveries have enabled us to correct much of this speculation and error.

First.—The recent knowledge acquired by the English, in China, assures us that the Chinese censuses are authentic, and as reliable as such documents generally are.

Secondly.—African travelers, such as Drs. Livingstone and Barth, have ascertained that the interior of Africa is much more populous than was supposed.

Thirdly.—The population of America we have almost exactly. For example, the population of the United States and British America, we have exactly, and it is not *one-sixth* part of 200,000,000; and yet, it is by far the most populous part of America. Let us now begin with America, and correct the German Professor's calculation.

The population of America, as estimated by statisticians, is as follows:

Malte Brun (1825)	46,000,000
M'Gregor (1828).....	42,164,440
Berlin Professor (1858).....	200,000,000

Now, at this time, we can arrive tolerably near the population of America, allowing for the slow progress of Spanish America, and the rapid progress of the Anglo-American. The result is as follows:

United States.....	28,500,000
British America.....	2,510,000
Russian America.....	500,000
Mexico.....	7,000,000
Central America.....	2,510,000
West Indies.....	3,500,000
Brazil.....	8,000,000
Colombia.....	4,000,000
Buenos Ayres.....	1,000,000
Monte Video and Uruguay.....	300,000
Paraguay.....	300,000
Peru.....	3,000,000
Bolivia.....	2,000,000
Chili.....	2,500,000
Guinea, etc., etc.....	500,000

Aggregate..... 66,100,000

We believe the above is rather an overestimate. It will be seen, that we have allowed but little more than twenty millions for South America. Is there any evidence that there is more? For each country specified, we have allowed more than authentic returns will justify. Where does the German Professor find his two hundred millions? No degree of probable estimates can make half that number.

Let us now look at Asia. The last authentic Chinese Census, recently taken, makes China and its dependencies, over 400,000,000.

Fair estimates for India and dependencies make about 150,000,000. Allowing, then, for Persia, Turkey in Asia, and some minor countries, 100,000,000, and we have a full estimate for Asia.

For Africa we make a greater allowance than the Berlin Professor. The recent travelers have found millions of people where, it was supposed, there were none. It will not be too much to put down Africa at 120,000,000.

Europe, as censuses are taken in every country, may be taken at what it is estimated above at. The result, then, is:

Europe.....	272,000,000
Asia.....	650,000,000
America.....	66,000,000
Africa.....	120,000,000
Oceania.....	2,000,000

Aggregate..... 1,123,000,000

Thus, *one billion one hundred and twenty-three million* is, in round numbers, the population of the globe. It is quite large enough, so far as we have any authentic information. The great error of the Berlin Professor is in his exaggeration of American population.

In the paragraph above, it is stated, that

the average mortality is 1 in 40; but, his is the average for the healthiest portions of Europe and America; and it is not to be supposed, that any thing like this is the average for the whole globe. Does any suppose that any thing like that average prevails in India, Africa, and Central America? In New Orleans, the average mortality is 1 in 20; or, just double what is stated above. In parts of Italy, the mortality is 1 in 25, and it must be quite as high in large districts of Asia and Africa. Were the health of the whole globe what it is in parts of Europe and America, the whole population of the globe would be doubled in less than half a century!

STEAM NAVIGATION ON CANALS.

Many years since we wondered that steam was not introduced on canals. The objection made was, that steam, by raising waves, would wear away the banks too rapidly. This was probably true, and the few experiments made with steam, utterly failed. The idea seemed to be given up; but since the enlargement of the Erie Canal, has been revived. Steam tugs, for the canal, are now being built at Buffalo, and will, probably, be successfully applied.

In advance of this movement, there seems to be two elements left out of view. The first is, the nature of the competition against which this contrivance is made. This competition is from railroads; but, railroad competition is not based on steam, or, cheapness of transportation, but on *velocity*, and thus the *gain of time*, and thus the gain of greater mercantile strength. The other point is, that by using steamboats, we also assume the expense of steamboats. We imagine, that for nine-tenths of all the articles which are the subject of transportation, the railroads must still retain a great advantage. We give, from an article in *Hunts' Merchants Magazine*, the views of those friendly to the new scheme. The writer says:

The present conditions of canal transportation, and as related to the other competitive lines for freight, demand a proper system of steam propulsion, such as may be given under three classes.

FIRST CLASS—DISPATCH FREIGHT.

This class should compete with the railroads as approximately as it can for the "fast freight," and which for miscellaneous freight is always the highest priced—and by an efficient mechanical system of propulsion, a steamer, with easy bow and stern lines, can freely make six miles per hour on the canal, and eight on the river; and by having priority at locks and other places, as the passenger packets used to have, it can make the passages between Buffalo and New York, each way, regularly in four days.

SECOND CLASS—A STEAMER AND FULL FREIGHT BOAT IN TOW.

This class can freely make four miles per hour on canal, and six miles on river, and having priority over third class, can make the passage between Lake Erie and this city (N. York) regularly in six days.

THIRD CLASS—A STEAMER WITH TWO OR THREE BOATS IN TOW.

This class can freely run from two to three miles per hour on canal, and four miles per hour on river—and as steam will wholly supersede horse power, this class will be delayed at times by the first and second classes, and will make passages variably from eight to twelve days.

In our opinion, no "six or eight miles" will enable the canal to compete with a railroad, and no three or four miles will do at all.

"Upon the railroads there are preferred classes of freight, and to all freight there are many consequent delays, as at turnouts in subjection to passenger trains and necessary conditions of time tables; hence, to their freight that is not perishable, express, or carried with preferred dispatch, they can not add any important advantages over four-day trips by dispatch steamers.

"It should be borne in mind that the railroads are "up to time" under the shrewdest competitive management, whilst the canal managers and forwarders have stuck like leeches to the tow-path, until they have sucked the financial blood from this great artery, so that she requires powerful stimulants in loans to reinvigorate her; hence, it wants an energetic and expeditious policy to meet the activities of the railroads and redeem her from the sluggish habits of the past.

"The New York Central Road carried during the last healthy business season (1856) in tons one mile, the equivalent of 474,700 tons of through freight between Buffalo and Albany, and at an aggregate expense account of \$4 29 per ton; and upon that quantity which was through freight she received \$8 26 per ton, so that the difference between the expense and receipts were nearly four dollars per ton, of which a considerable part must be required for "permanent repairs" to track, as due to the wear and tear of such freight; hence, the full cost of carrying this freight exceeds \$4 29 by a considerable part of the four dollars per ton excess; hence, also, \$4 29 per ton is considerably below her living ability to carry through freight."

This is the argument of the friends of canal steam transportation.

"The positive knowledge that the canal steamers that have triumphed so as to reach a speed of about four miles per hour, with about half freight under crowded fires and steam, or better if better results have been attained, have done it by virtue of from one-fourth to one-third of their power, is not readily made plain to all, because in the absence of an efficient system already in practice by the effects of which we might judge, we have now to trace the expenditures by scientific analysis from the known facts, and it is difficult to satisfy persons of these truths just as it would have been to have convinced them before the use of rails that only one-third of

the draft of the horses before the stage was expended solely in the horizontal movement of the load, but when the natural eye sees that it takes three pairs of horses by stage to take the load of one pair on rails by their side, the judgment is assisted and analysis confirmed."

We believe that steamboats, on canals, may be carried to the extent of six miles an hour, without injury to the banks; but, we do not believe that when they do so, they will have gained much on the railroads. On the contrary, the latter will probably gain more on the canals. The great point is that *time is money*, and the railroads gain time against everything.

POPULATION OF CINCINNATI.

The present population of Cincinnati is a question of much interest to many persons. Many very good guesses have been made, but the School Census just taken enables us to ascertain it with great accuracy. In the proceedings of the School Board we find the following:

The following abstract of the School Census returns of persons in the different districts between the ages of 4 and 21 was presented.

The aggregate shows an increase over last year's returns of 5,276.

DISTRICT.	WHITE YOUTH.		COLORED YOUTH.		Total.
	Males.	Females.	Males.	Females.	
1st.....	2600	2518	17	16	5157
2d.....	2747	2946	436	439	6378
3d.....	1665	1122	1	5	2193
4th.....	739	683	...	...	1422
5th.....	1924	2144	149	177	4196
6th.....	2142	1973	23	24	4172
7th.....	2676	3088	108	256	6188
8th.....	3124	3678	120	144	7126
9th.....	1441	2107	77	72	3697
10th.....	1822	1104	14	10	2910
11th.....	2115	2214	72	17	4346
12th.....	1623	1899	35	43	3600
13th.....	1474	1423	1	1	2899
14th.....	1858	1694	2	2	3556
Wt. Auburn....	273	369	1	1	543
Walnut Hills....	725	726	2	3	1456
House of Refuge.	213	37	...	...	250
Gity Infirmary..	26	30	...	...	56
Totals.....	27502	29105	1088	1192	58857

Now, there is an exact ratio between those of this age, and the whole population. This ratio varies a little, but very little, in different periods.

The Census and the School Census of 1850 presented these results:

Whole population.....	115,438
School Census.....	35,004

Proportion of schoolable youth.....	30 per cent.
In 1840—proportion.....	33 per cent.

The population of Cincinnati is, therefore, not less than 176,000, and not more than 196,000. If we take the mean, the present population within the corporate limits is 185,000, and we have no doubt it is at least that; but this is really not the whole. Both Philadelphia and New York count their environs to more than ten miles from the center of the city. If we take six miles around Cincinna-

ti, (which contains an almost continuous population,) we have the following result:

Cincinnati.....	185,000
Mill Creek.....	14,000
Storrs.....	3,000
Spencer.....	3,000
Aggregate.....	205,000

Covington contains 15,000, and Newport 8,000, (on the opposite side of the Ohio); and both are within half a mile of Cincinnati. Disregarding their artificial distinctions, and looking only to the aggregation of people, there are at least 228,000 in Cincinnati and its environs, and on the Ohio side 205,000. This is a pretty good number for a town, which, fifty years ago, was a ragged village!

CORRESPONDENCE.

The *Railroad Record* of 21st October, in tracing the invention of the *steamboat*, has the following: "It is certain that somewhere about 1787 RUMSEY, in Virginia, actually made a *steamboat*, and it actually moved by *steam* on the Potomac river. * * We know not the particular defect of Mr. Rumsey's boat, but we believe it was made to go by *oars*, which must always prove a failure in steam machinery."

You attribute to Rumsey's boat what was the peculiarity of Fitch's boat, the latter having been moved by oars. Rumsey's boat was moved by a pump, which drew in water from the bottom at the bow, and ejected it at the stern, through a longitudinal trunk, placed next to the keel.

It may be interesting to you to know that a boat of two hundred tons burden, was built at Silver Creek, Indiana (Falls of Ohio), in the year 1819, under the care of Dr. Rumsey, of Kentucky, a brother of the inventor, James Rumsey. The machinery for the boat was made at Cincinnati, by William Green, who established the first foundry in Cincinnati, and the first shop for building engines. I have an impression that the boat called the *Rumsey* was brought to Cincinnati to receive her machinery, and that it was completed under the superintendence of Neziab Bliss, who was the last person in charge of the Air Shaft, built by General Lytle, in the side hill, above the present Water Works, for driving machinery with rarified air.

In the boat I speak of, the longitudinal trunk which rested on the keelson, extended from the stern port, three-fourths of the boat's length—the trunk being open at the after end and closed at the forward end. On the forward end of the trunk, was placed an upward cylinder, two feet and a half long, and on the top of the cylinder was bolted another cylinder of like dimensions: a piston head worked in each cylinder, and the heads were connected by a rod. The upper cylinder was for steam, and the lower one served as a pump, being connected by a pipe with the bottom of the boat for supply, and with the

longitudinal trunk for the propulsion of the jet which gave motion to the boat. The boiler of this boat was peculiar, and was probably the invention of Dr. Rumsey. It was an upright shell boiler, of large diameter (six feet), and within it were flues of peculiar forms, which Dr. Rumsey called crystals, from their shape, being like watch crystals: these concave iron discs were riveted together in pairs at the edges—and an opening through them where the convex sides united, made a continuous flue to the chimney: these were relied on to present a large fire surface, and make a due displacement of water. My recollection is that the boat was made to run with tolerable speed, compared with other boats of the day; but the jarring and tremulation were so great that no boat could have stood it long. The boat was afterwards used with side wheels and a new engine.

Yours respectfully,

JOHN H. JAMES.

URBANA, O., Oct. 25, 1858.

LOUISVILLE AND NASHVILLE R. R. CO.

We gather some interesting facts from the President's report to the stockholders of this Company. He says that by the 15th of November there will be about one hundred miles of your road prepared for business; of that distance twenty six are next to Nashville; the others, next to Louisville—extending near to the bank of Green river. The work on the tunnel at Muldrough's Hill is far advanced; but, to finish it by the time the balance of the track is ready for iron, will require an increased expenditure per month, which is desired, to render more successful the operations of the road, when prepared for through transportation.

It has hitherto been the policy of the Board to use the means at their command to extend the track as far as possible in the country, with a view to accommodate the people along the line, to secure the profits of the trade, to facilitate an early completion of the road, and to save the cost of transportation of heavy material, procured at Louisville, to be used in structures distant from the city. To carry out that policy, the Board were induced to construct tressling in crossing branches encountered in ascending Muldrough's Hill and in crossing of Valley Creek and Nolin. That work, though regarded as entirely safe, and may in perfect security be used for years, may be regarded as for temporary use, and will be eventually superceded by permanent and substantial bridges. The vast amount of masonry at Green River, constructed to receive an iron bridge one thousand feet long, and one hundred and fourteen feet above the usual stage of the water, will be completed about the first day of December, and the bridge erected by or before the first day of June next. By that time it may be confidently assumed that the entire grade will be

completed for track, except some six or seven sections, equal to that number of miles, in the vicinity of Ritter and Bell's, between Green river and the Warren county line, and one section at Cumberland ridge, in Tennessee, which may require a little more time. The masonry for the Barren river bridge has been completed. It may be assumed that there is of the 85½ miles unfinished road sixty ready for track. To complete the road by the first day of January, 1860, it will be necessary to secure deliveries of iron, chairs and spikes at Bowling Green. It is equally necessary to have the material for the Barren river bridge delivered in the coming winter and spring. The track may then be laid in each direction from Bowling Green. By deliveries made at Louisville and Nashville, the work may be brought to a close within the time stated.

To prepare the road for track, between Bacon Creek and Warren county line, including the bridge at Green river, required an expenditure on the first day of September of \$281,109; of that sum \$17,486 00 will be expended by the 10th day of October. To prepare the road for track, on the unfinished part in Tennessee, required an expenditure on the first day of September of \$100,500; of that sum there will be expended by the 10th day of October about \$10,000. Add to the last the sum yet to be expended on two sections in Simpson county, about \$20,000, and you have the relative sums representing the work to be done at the two ends, to bring it to a close at Bowling Green. The sum to be expended to prepare track for the iron from Louisville to Bowling Green is about one hundred and eighty thousand dollars more than the sum required for same work to reach Bowling Green from Nashville. Of this excess \$63,000 will be paid in bonds of the county and city.

The total amount of expenditure up to the first day of October, 1858, including interest paid for money and discount was \$3,834,980.07; to that sum may be added the sum received, and to be received from the State of Tennessee, to aid in the construction of the bridge across Cumberland river, paid in State bonds, \$100,000, making an aggregate expenditure amounting to \$3,934,980.07.

This Company has, and will receive from the Edgefield and Kentucky Railroad Company, to aid in the construction of the first nine and a half miles from Nashville, about the sum of \$130,000; of that there is yet to be paid about \$25,000.

It now requires, to complete the graduation, masonry and bridge structures on the whole line, the sum of \$585,225; of that the sum of \$115,375 is to be paid in the bonds of the county and city, at par. On the 10th day of October the sum of \$37,000 will be expended. To put the entire line of road in that complete order which entitles it to the character of a complete road, with full equipment, required on the first day of September the sum of \$1,642,755; of that, the above sum of \$115,375, to be paid in county bonds at par, constitutes a part; deducting those bonds as on hand,

ready to be paid, leaves the sum of \$1,537,380 to be provided for. To meet that sum, the Company has on hand, and will receive assets in the following sums: County bonds, other than those to be paid on contract at par, \$278,325; city bonds, \$54,000; bonds of the State of Tennessee on hand, \$89,000; bonds to be received from the State of Tennessee, when the graduation in that State is finished, \$155,000; the sum to be received from the Edgefield and Kentucky Road, in money and State bonds, about the sum of \$25,000. Cash on hand, \$13,637 50. Bills receivable and sums due the Company, \$111,376 99. The liabilities of the Company amount at this time to \$320,131 70. Apply an amount of the assets equal to liabilities, and deduct the remainder from the \$1,537,380, and you leave the sum of \$1,195,797 19. In the full estimate made, the sum of \$140,000 is set down to account of ballasting the bridge truss, to supply the tressels in ascending Muldrough's Hill, and across Valley Creek and Nolin are estimated. Including those two items, and such others as may be reduced, it is estimated, by the Engineer-in-Chief, that of the sum estimated of the full cost, \$300,000 may be postponed until the earnings of the road will enable the Company to complete the postponed work. Deducting that, and you have the sum of \$895,797 19 to provide for by the sale of mortgage bonds.

To create a fund to prosecute the work to final completion, a mortgage has been executed—constituting the Honorable James Guthrie, of Kentucky, and John L. Aspinwall, Esq., of the city of New York, Trustees. It purports, on its face, to secure the bonds of the Company, amounting to \$2,000,000. That sum was determined on to guard against the possibility of a second issue and a second mortgage. It is not contemplated to sell the whole issue. It is hoped and believed that the road can and will be put in such state as to do all the business offered by a sale of not more than twelve hundred of those bonds. The mortgage contains provisions necessary to secure, and places on equal footing, all the holders of bonds. It provides summary remedies, which may be enforced in the Courts at Louisville, or in the District Courts of the United States for Kentucky, after published advertisements. It is absolute on all the property and franchise of the Company on that part of the road in Kentucky, equal to one hundred and forty miles. By the statutes of the State of Tennessee provision is made for the appropriation of \$10,000 per mile in that State, 45½ miles, paid and to be paid, in the bonds of the State. That appropriation is made and received by the Company on the condition that the State of Tennessee, by the statute making the grant, reserves a lien on the property, real and personal, of the Company, lying and used in that State, its franchise, etc. That sum per mile, and \$100,000, appropriated to aid in the erection of Cumberland bridge, constitute the gross sum of \$555,000, for which the State will hold a lien. The State bonds bear six per cent. per annum, payable semi-annually, in January and July, and mature in the year 1892.

The mortgage bonds offered for sale, mature in succeeding years, beginning first at the expiration of ten and a half years, from the first day of July, 1858, and running up to, and inclusive of eighteen and a half years from their date; they bear seven per cent., payable semi-annually, at the Bank of America, in New York, and of the denomination of one thousand dollars each.

To impress the public mind with the value of these bonds data is given for calculation. The foundation of that data is the sum expended and to be expended, when the bonds are sold. Beside the property mortgaged by the express terms of the mortgage, an amount of the earnings of the road after payment of repairs, and cost of running, equal to the payment of the interest of the whole sum issued and sold, and to pay the principal of the bonds as they fall due, is set apart as a sinking fund.

Assuming the length of the road at 185 miles, and the gross receipts at \$4,000 per mile, you have a gross sum per year of \$740,000. That is about the sum earned by the Lexington and Frankfort road, and is believed to be the lowest probable sum which will be earned by the L. & N. R. Co. It is believed when the road is complete and in successful operation, \$5,000 per mile may be safely calculated on, and when the Memphis connection shall be formed, a much larger sum. The latter sum will produce per year \$925,000. The receipts of the road from 1st October, 1857, to October, 1858, amounted to \$163,288. For the greater part of the time the main road was operated, only four miles beyond the junction with the Lebanon branch, and did but little more than pay expenses, expenditures for repair and running, \$63,928. To this time it has required, as perceived, about forty cents to the dollar for repairs, and the expense of running. It is believed that owing to the peculiar formation of the earth over which the road passes; the fact that the bridge structures are free of danger from high water, and that the rail for the greater part, if not the whole distance, will be of American manufacture, the road can and will be operated on an expenditure ranging not far from forty-five per cent. of its earnings. The fact that there is not, and most likely will not be constructed a competing road, the company will not of necessity be forced to a rate of charges below a remunerative point.

The annual charges on the profits are as follows:

First, the interest on the Tennessee bonds \$33,300, and on the mortgage bonds say twelve hundred at 7 per cent., \$84,000. Second, on the second million subscribed by the city of Louisville, \$65,000, making an aggregate of \$177,300. That sum taken from the net profit derived from the least sum assumed as the yearly receipts would leave the sum of \$230,700, over paying expense of running and repairs, and the payment of interest.

When the work will have been completed, the full sum paid in contract of the bonds of the counties and city at par, will be \$432,090, much the larger part of which is in the bonds of the counties, whilst many others have been paid to contractors and for material, at the highest ruling cash rates.

It is confidently believed that the Louisville and Nashville Railroad will be completed at as little cost as any road built in the United States, passing over a similar country.

The real estate of the Company, other than the road way, is worth over two hundred thousand dollars.

The Company has contracted with the government for transportation of the mail on the road, as it progresses at the rate of \$100 per mile.

The machinery employed may be estimated to cost \$146,021 50.

With this state of facts the Company in-

troduces its mortgage bonds to the consideration of financial men, and circles:

The capacious and well arranged depot and freight house being built at Louisville, is hastening to completion. Those who may choose to be informed of the transportation in the coming year, will be able to attest the necessity and importance of that building. A freight house and depot has been erected by the Company at Elizabethtown. There is one in progress at Edgefield, and one at Gallatin, Tenn., and arrangements are being made to erect suitable buildings at Bowling Green. At intermediate points, buildings will generally be erected by individuals at their own expense.

Since the last meeting of the stockholders, the Board has effected a purchase of the Kentucky locomotive works, situated on a part of the lot purchased by the company for depot ground, &c. The buildings were erected, and constructed along the track in the direction to the depot and freight house, now being built by the Company. A Committee composed of Messrs. Guthrie and Alexander, were appointed to examine into the propriety and necessity of the purchase. They consulted the engineer, the architect and mechanics engaged in the service; had an estimate made of the tools, &c., accompanying the machine shops, and the cost in money necessary to erect buildings indispensable to the operation of the road and felt authorized to advise a purchase at \$80,000. For that sum the purchase was made, and payment agreed on, which do not interfere with the progress of construction. The property purchased costs its first owners \$140,000. It was to be sold, and it stood where the Company needed it for the repair of locomotives, and rolling stock, and the building of cars, &c. The annual saving will greatly exceed the interest on the cost. The purchase is believed to be a good one, and will prove highly beneficial to the Company.

THE LEBANON BRANCH.

It is known to the Stockholders, that this is now in successful operation. Its transportation and travel fully sustain what was predicted for it, and establishes conclusively its advantages as an auxiliary road.

THE MEMPHIS BRANCH.

If it is built under the provisions of the charter of the Louisville and Nashville Railroad Company, under their power to construct branch roads, its management and control will be under the President and directors of the Company. The net profits will go into the general fund of profits. It diverges from the main road, near Bowling Green, about 115 miles from Louisville, and passes through Russellville to the line between the States of Kentucky and Tennessee, where it will connect with the Clarksville Road, at a distance of forty-eight and a half miles from the point of divergence.

A NOVELTY IN MECHANICAL SCIENCE.—Somebody in France, we believe, has discovered that if a jet of gas be directed into an iron box of sand, it will diffuse itself through the mass, and rising to the surface, may with perfect safety be instantly set on fire. The combustion will be complete, and the heat will almost instantly diffuse itself through the sand, heating it equally throughout, and requiring but one minute to raise such intense temperature that it will retain its heat for several hours after the gas is shut off and the

light extinguished. The gas required to light the room will also be sufficient to heat it. By this sand and gas stove it is claimed that two cents' worth of gas will furnish enough caloric gas to heat a room for eight hours. We do not believe this part of the story, but can see no reason why, in some such manner as that suggested, gas may not be made to heat a room at a much smaller cost than wood or coal.—*Providence Post*.

This discovery was made in Albany—not in France, as the *Post* has it. Mr. Easterly has invented a stove for heating rooms by this process; and Mr. Calvin Pepper claims to be the discoverer of the principle of heating and lighting by gas diffused through sand. For some months experiments have been going on at Treadwell's Foundry, and, as we are informed, with gratifying success.

[From the Atlantic Monthly.]

RAILROAD ENGINEERING IN THE UNITED STATES.

Of the whole expense of building a railroad, where the country is to any considerable degree broken, the reduction of the natural surface to the required form for the road, that is, the earthwork, or, otherwise, the excavation and embankment, amounts to from thirty to seventy per cent. of the whole cost. Here, then, is certainly an important element on which the engineer is to show his ability; let us look a little at it, even at the risk of being dry.

It is by no means necessary to reduce the natural surface of the country to a level or horizontal line; if it were so, there would be an end to all railroads, except on some of the Western prairies. This was not, however, at first known; indeed, those who were second to understand the matter denied the possibility of moving a locomotive even on a level by applying power to the wheels, because, it was said, the wheels would slip round on the smooth iron rail and the engine remain at rest. But lo! when the experiment was tried, it was found that the wheel not only had sufficient bite or adhesion upon the rail to prevent slipping and give a forward motion to the engine, but that a number of cars might be attached and also moved.

This point gained, the objectors advanced a step, but again came to a stand, and said: "If you can move a train on a level, that is all,—you can't go up hill." But trial proved that easy inclines (called grades) could be surmounted—say, rising ten feet for each mile in length.

The objectors take another step, but again put down their heavy square-toed foot, and say, "There! a'n't you satisfied! you can go over grades of twenty feet per mile, but no more,—so don't try." And here English engineers stop—twenty feet being considered a pretty stiff grade. Meanwhile, the American engineers, Whistler and Latrobe, the one dealing with the Berkshire Mountains in Massachusetts, the other with the Alleghenies in Virginia, find that not only are grades of ten and twenty feet admissible, but, where Nature requires it, inclines of forty, sixty, eighty, and even one hundred feet per mile,—it being only remembered, the while, that just as the steepness of the grade is augmented, the power must be increased. This discovery, when properly used, is of immense advantage; but in the hands of those who

do not understand the nice relation which exists between the mechanical and the financial elements of the question, as governed by the speed and weight of trains, and by the funds at the company's disposal, is very liable to be a great injury to the prospects of a road, or even its ruin.

It was urged at one time, that the best road would have the grades undulating from one end to the other,—so that the momentum required in one descent would carry the train almost over the succeeding ascent, and that very little steam-power would be needed. This idea would have place, at least to a certain extent, if the whole momentum was allowed to accumulate during the descent; but even supposing there would be no danger from acquiring so great a speed, a mechanical difficulty was brought to light at once, namely, that the resistance of the atmosphere to the motion of the train increased nearly, if not quite, as the square of the speed; so that after the train on the descent acquired a certain speed, a regular motion was obtained by the balance of momentum and resistance, whence a fall great enough to produce this regular speed would be advantageous, but no more. On the other hand, the extra power required to draw the train up the grades much overbalanced the gain by gravity in going down.

Here, then, we have the two extremes; first, spending more money than the expected traffic will warrant, to cut down hills and fill up valleys; and second, introducing grades so steep that the amount of traffic does not authorize the use of engines heavy enough to work them.

The direction of the traffic, to a certain extent, determines the rate and direction of the inclines. Thus, the Reading Railroad, from Philadelphia up the Schuylkill to Reading, and thence to Pottsville, is employed entirely in the transport of coal from the Lehigh coal-fields to tide water in Philadelphia; and it is a very economically operated road, considering the large amount of ascent encountered, because the load goes down hill, and the weight of the train is limited only by the number of empty cars that the train can take back.

This adoption of steep inclines may be considered as an American idea entirely, and to it many of our large roads owe their success. The Western Railroad of Massachusetts ascends from Springfield to Pittsfield, for a part of the way, at 83 feet per mile. The New York and Erie Railroad has grades of 60 feet per mile. The Baltimore and Ohio climbs the Alleghenies on inclines of 116 feet per mile. The Virginia Central Road crosses the Blue Ridge by grades of 250 and 295 feet per mile; and the ridge through which the Kingwood Tunnel is bored, upon the Baltimore and Ohio Railroad, was surmounted temporarily by grades of 500 feet per mile, up which each single car was drawn by a powerful locomotive.

Another element, of which American engineers have freely availed themselves, is curvature. More power is required to draw a train of cars around a curved track, than upon a straight line. In England the radius of curvature is limited to half a mile, or thereabouts. The English railway carriage is placed on three axles, all of which are fixed to the body of the vehicle; the passage of curves, of even a large diameter, is thus attended by considerable wear and strain; but in America, the cars, which are much longer

than those upon English roads, are placed upon a pintle or pin at each end, which pin is borne upon the center of a four-wheeled truck,—by which arrangement the wheels may conform to the line of the rails, while the body of the car is unaffected. This simple contrivance permits the use of curves which would otherwise be entirely impracticable. Thus we find curves of one thousand feet radius upon our roads, over which the trains are run at very considerable speed; while in one remarkable instance (on the Virginia Central Railroad, before named) we find the extreme minimum of 234 feet. Such a track does not admit of high speeds, and its very use implies the existence of natural obstacles which prevent the acquirement of great velocities.

In fine, the use which the engineer makes of grades and curves, when the physical nature of the country, and the nature and amount of the traffic expected are known, may be taken as a pretty sure index of his real professional standing, and sometimes as an index of the moral man; as when, for example, he steepens his grades to suit the contractor's ideas of mechanics,—in other words, to save work.

Not less in the construction of bridges and viaducts, than in the preparation of the road bed proper, does the American engineering faculty display itself. Timber, of the best quality, may be found in almost every part of the country, and nowhere in the world has the design and building of wooden bridges been carried to such perfection and such extent as in the United States. We speak here of structures built by such engineers as Haupt, Adams, and Latrobe,—and not of those works, wretched alike in design and execution, which so often become the cause of what are called terrible catastrophes and lamentable accidents, but which are, in reality, the just criticisms of natural mechanical laws upon the ignorance of pretended engineers.

Among the finest specimens of timber-work in America is the Cascade Bridge upon the New York and Erie Railroad, designed and built by Mr. Adams, consisting of one immense timber arch, having natural abutments in the rocky shores of the creek;—the second edition of the bridges generally upon the same road, by Mr. McCallum, which replaced those originally built during the construction of the road,—these hardly needing to be taken down by other exertion than their own;—the bridges from one end to the other of the Pennsylvania Central Road, by Mr. Haupt;—the Baltimore and Ohio "arch-bridge" bridges, by Mr. Latrobe;—and the Genessee "high bridge," (not a bridge, by the way, but a trestle,) near Portageville, by Mr. Seymour, which is eight hundred feet long, and carries the road two hundred and thirty feet above the river, having wooden trestles (post and brace-work) one hundred and ninety feet high, and seventy-five feet wide at base, and twenty-five feet at top, and carrying above all a bridge fourteen feet high; containing the timber of two hundred and fifty acres of land, and sixty tons of iron bolts, costing only \$140,000, and built in the short time of eighteen months. This structure, if replaced by an earth embankment, would cost half a million of dollars, and could not be built in less than five years by the ordinary mode of proceeding.* Further, the in-

* Lest these statements should sound extravagant, the reader will please reckon up the amounts for himself. A bank twenty-five feet wide on top, eight hundred feet long, and two hundred and twenty feet high,

terest, for so long a time, on the large amount of money required to build the embankment, at the high rate of railroad interest, would nearly, if not quite, suffice to build the wooden structure.

Again, our wooden bridges of the average span cost about thirty-five dollars per lineal foot. Let us compare this with the cost of iron bridges, on the English tubular plan, the spans being the same, and the piers, therefore, left out of the comparison.

Suppose that a road has in all one mile in length of bridges. Making due allowance for the difference in value of labor in England and America, the cost per lineal foot of the iron tubular bridges could not be less (for the average span of 150 feet) than three hundred dollars.

5290 feet by \$35 is..... \$184,800 00
5280 feet by 300 is..... 1,584,000 00
The six per cent. interest on the first is..... \$11,088 00
The six per cent. interest on the second is.... 95,040 00

And the difference is.....\$83,932 00

or nearly enough to rebuild the wooden bridges once in two years; and ten years is the shortest time that a good wooden bridge should last.

The reader may wonder why such structure as the bridge over the Susquehanna at Columbia, which consists of twenty-nine arches, each two hundred and fifty feet span, the whole water-way being a mile long, and many other bridges spanning large rivers, and having an imposing appearance, are not referred to in this place. The reason is this: large bridges are by no means always great bridges; nor do they require, as some seem to think, skill proportioned to their length. There are many structures of this kind in America, of twenty, twenty-five, or thirty spans, where the same mechanical blunders are repeated over and over again in each span; so that the longer they are and the more they cost, the worse they are. It does not follow, because newspapers say, "magnificent bridge," "two million feet of timber," "eighty or one hundred tons of iron," "cost half a million," that there is any merit about either the bridge or its builder; as one span is, so is the whole; and a bridge fifty feet long, and costing only a few hundreds, may show more engineering skill than the largest and most costly viaducts in America. Few bridges require more knowledge of mechanics and of materials, than Mr. Haupt's little "trussed girders" on the Pennsylvania Central Road,—consisting of a single piece of timber, trussed with a single rod, under each rail of the track.

Again, as regards American iron bridges, the same result is found to a great extent. Thus, Mr. Roebling's Niagara Railroad Suspension Bridge cost four hundred thousand dollars, while a boiler plate iron bridge upon the tubular system, would cost, for the same span, about four million dollars, even if it were practicable to raise a tubular bridge in one piece over Niagara river at the site of the Suspension Bridge. Strength and durability, with the utmost economy, seem to have been attained by Mr. Wendel Bollman, superintendent of the road department of the Baltimore and Ohio Railroad,—the minute details

of construction being so skillfully arranged, that changes of temperature, oftentimes so fatal to bridges of metal, have no hurtful effect whatever. And here, again, is seen the distinctive American feature of adaptation or accommodation, even in the smallest detail. Mr. Bollman does not get savage and say, "Messieurs Heat and Cold, I can get iron enough out of the Alleghanies to resist all the power you can bring against me!"—but only observes, "Go on Heat and Cold! I am not going to deal directly with you, but indirectly, by means of an agent which will render harmless your most violent efforts!"—or, in other words, he interposes a short link of iron between the principal members of his bridge, which absorbs entirely all undue strains.

It is not to be supposed from what has preceded, that the American engineer does not know how to spend money, because he gets along with so little, and accomplishes so much; when occasion requires, he is lavish of his dollars, and sees no longer expense, but only the object to be accomplished. Witness, for example, the Kingwood Tunnel, on the Baltimore and Ohio Railroad, where for a great distance the lining or protecting arching inside is of heavy ribs of cast iron,—making the cost of that mile of road, embracing the tunnel, about a million of dollars. Nor will the traveler who observes the construction of the New York and Erie Railroad up the Delaware Valley, of the Pennsylvania Central down the west slopes of the Alleghanies, or of the Baltimore and Ohio down the slopes of Cheat river, think for a moment that the American engineer grudges money where it is really needed.

Stone bridges so rarely occur upon the roads of America, that they hardly need remark. The Starucca Viaduct, by Mr. Adams, upon the New York and Erie Railroad, and the viaduct over the Patapsco, near the junction of the Washington Branch with the main stem of the Baltimore and Ohio Railroad, show that our engineers are not at all behind those of Europe in this branch of engineering.

From the civil let us pass to the mechanical department of railroad engineering. This latter embraces all the machinery, both fixed and rolling; locomotives and cars coming under the latter,—and the shop machines, lathes, planers, and boring machines, forging, cutting, punching, rolling, and shearing engines, pumps and pumping engines for the water-stations, turn-tables, and the like, under the former. Of this branch, little, except the design and working of the locomotive power, needs to be mentioned as affecting the prosperity of the road. Machine-shops, engine-houses, and such apparatus, differ but slightly upon different roads; but the form and dimensions of the locomotive engines should depend upon the nature of the traffic, and upon the physical character of the road, and that most intimately,—so much, indeed, that the adjustment of the grades and curvatures must determine the power, form, and whole construction of the engine. This is a fact but little appreciated by the managers of our roads; when the engineer has completed the road-bed proper, including the bridging and masonry, he is considered as done with; and as the succeeding superintendent of machinery is not, at that time, generally appointed, the duty of obtaining the necessary locomotive power devolves upon the President or contractor, or some other person who knows nothing whatever of the requirements

of the road; and as he generally goes to some particular friend, perhaps even an associate, he of course takes such a pattern of engine as the latter builds,—and the consequence is that not one out of fifty of our roads has steam-power in any way adapted to the duty it is called upon to perform.

There is no nicer problem connected with the establishment of a railroad, than, having given the grades, the nature of the traffic, and the fuel to be used, to obtain therefrom by pure mechanical and chemical laws the dimensions complete for the locomotives which shall effect the transport of trains in the most economical manner; and there is no problem that, until quite lately, has been more totally neglected.*

Of the whole cost of working a railroad about one third is chargeable to the locomotive department; from which it is plain that the most proper adaptation is well worth the careful attention of the engineer. Though it is generally considered that the proper person to select the locomotive power can be none other than a practical machinist, and though he would doubtless select the best workmanship, yet, if not acquainted with the general principles of locomotion, and aware of the character of the road and of the expected traffic, and able to judge, (not by so-called experience, but by real knowledge,) he may get machinery totally unfit for the work required of it. Indeed, American civil engineers ought to qualify themselves to equip the roads they build; for none others are so well acquainted with the road as those who, from a thorough knowledge of the matter, have established the grades and the curvatures.

The difference between adaptation and non-adaptation will plainly be seen by the comparison below. The railroad from Boston to Albany may be divided into four sections of which the several lengths and corresponding maximum grades are as tabulated.

Length in miles. Steepest grade	
Boston to Worcester.....	44 30
Worcester to Springfield.....	54 50
Springfield to Pittsfield.....	52 83
Pittsfield to Albany.....	59 45

A load of five hundred tons upon a grade of thirty feet per mile, require of the locomotive a drawing power of 11,500 lbs.

Upon a 50 feet grade.....	15,500 lbs.
Upon an 83 feet grade.....	22,500 lbs.
Upon a 45 feet grade.....	14,500 lbs.

Now, if the engines are all alike, (as they are very nearly,) and each is able to exert a drawing-power of five thousand pounds to move a load of five hundred tons from Boston to Albany, we need as follows:

B. to W.	$\frac{11,500}{5,000}$	or 2 engines.
W. to S.	$\frac{15,500}{5,000}$	or 3 engines.
S. to P.	$\frac{22,500}{5,000}$	or 5 engines.
P. to A.	$\frac{14,500}{5,000}$	or 3 engines.

* The most careless observer has doubtless noticed that the front part of a locomotive rests upon the center of a truck, having four small wheels; the back and middle part, he will also remember, is borne upon large spoke wheels, which are connected with the machinery; upon the size of these last depend the power and speed of the engine. The larger the wheels the less the power, and the higher the velocity which may be got; again, the wheel remaining of the same size, by enlarging the dimensions of the cylinders the power is increased; and the wheels and cylinders remaining the same, by enlarging the boiler we can make stronger steam and thus increase the power. There may be seen upon the Road from Boston to Springfield, engines with wheels nearly seven feet in diameter, used for drawing light express trains; whilst upon roads ascending the Alleghanies, may be seen wheels of only three and a half feet diameter, which are employed in drawing trains up the steep grade. Increase of steepness of grade acts upon the locomotive in the same manner as increase of actual load; as upon a level the natural tendency of the engine is to stand still, while on an incline the tendency is to roll backwards down hill.

would contain two million cubic yards of earth; which, at twenty-five cents per yard, would cost half a million of dollars, exclusive of a culvert to pass the river, of sixty, eighty, or one hundred feet span and seven hundred feet long. Twenty trains per day, of thirty cars each, one car holding two yards, would be twelve hundred yards per day; two million, divided by twelve hundred, gives 1,666 days.

100 And the whole increase. 18.6

The cause of accident beyond the control of passengers are,—

Collision by opposition,
Collision by overtaking,
Derailment by switches misplaced,
Derailment by obstacles on the track,
Breakage of machinery,
Failure of bridges,
Fire,
Explosion.

Those causes which are aggravated by fast traveling are the first, second, fifth, and sixth. The effects of all are worse at high than low velocities.

The proportion of accidents due to each of these causes, taken at random from one hundred cases on English roads, (American reports do not detail such information with accuracy,) were,—

Collision	56	56
Breakage of machinery.....	18	18
Failure of road.....	14	14
Misplaced switches.....	6	6
Obstacles on rails.....	6	6
Boiler explosions.....	1	1

Total88 100

Eighty-eight per cent. being from those causes which are aggravated by increase of speed; and if we suppose the amount of aggravation to augment as the speed, the danger of traveling is eighty-eight per cent. greater by a fast than a slow train.

These are the direct evils of high speeds; there are also indirect evils, which are full as bad.

All trains in motion at the same time, within a certain distance of the express, must be kept waiting, with steam up, or driven at extra velocities to keep out of the way.

Where the time-table is so arranged as to call for speed nearly equal to the full capacity of the engine, it is very obvious that the risks of failure in "making time" must be much greater than at reduced rates; and when they do occur, the efforts made to gain the time must be correspondingly greater and uncertain. A single example will be sufficient to show this.

A train, whose prescribed rate of speed is thirty miles per hour, having lost five minutes of time, and being required to gain it in order to meet and pass an opposing train at a station ten miles distant, must necessarily increase its speed to forty miles per hour; and a train, whose prescribed rate of speed is forty miles per hour, under similar circumstances, must increase its speed to sixty miles per hour. In the former case it would probably be accomplished, whilst in the latter it would more probably result in failure,—or, if successful, it would be so at fearful risk of accident.

However true it may be that many of our large roads are well, some of them admirably managed, it is none the less a fact that the greater portion are directed in a manner far from satisfactory,—many, indeed, being subjected to the combined influence of ignorance and recklessness.

Many people wonder at the bad financial state of the American railroads; the wonder is, to those who understand the way in which they are managed, that they should be worth anything at all. It is useless to disguise the fact, says a writer in one of our railroad papers, that the great body of our railroad directors are entirely unfit for their position. They are, personally, a very respectable class of men, (Schuylerisms and Tuckermanisms excepted),—men who, after having passed through their active business lives successfully, and after retirement, are, in the minds of some, eminently fitted to adorn a director's

chair. Never was there a greater mistake. What is wanted for a railroad director is an active, clear-headed man, who has not outlived his term of activity. We want railroad directors who know how to reduce the operating expenses per mile, and not men who oppose their bigoted ignorance to everything like change or improvement, who can see no difference between science and abstract ideas. It would seem that the only question to be asked with regard to the fitness of a man for being a director is—Is he rich and respectable? If he has these qualities, and is pretty stupid withal, he is in a fair line for election. We tell our railroad readers, that, if they desire to make their property valuable, and rescue it from becoming a byword and a reproach, they have got to elect men of an entirely different stamp,—men of practical experience, in the best sense of the term, who have intelligence enough to know and apply all those vital reforms upon which depends the future success of their undertakings,—the men of the workshop, the track, and the locomotive. And we shall yet see the more intelligent of them taking the place, at the directors' board, of the retired merchants, physicians and other respectable gentlemen, who now lend only the names of their respectability to perpetuate a system of folly that has reduced our railroad management below contempt. As at present constituted, our boards are a very showy, but very useless piece of mechanism. The members attend at meetings when they feel just like it, and sign their names to documents and statements which have been prepared for them by others, without much knowledge of what the contents are; their other duties consisting chiefly in riding over their own and connecting roads, free of charge.

Why should railroad directors work for nothing for the stockholders? Ah, Messrs. Stockholders you little know in reality how fat a salary your directors make to themselves, by nice little commissions, by patronizing their favorite builders of locomotives and cars, and by buying the thousand and one patents that are so urgently recommended! Do you carry your broken watch to a blacksmith or to a stone mason to be mended? Neither, we think. Why, then, do you leave the management of a work which engineers, machinists, carpenters, masons, and men of almost every trade, have spent time and care upon to build, to the respectable merchant, lawyer, or banker, who thinks the best road that which has the softest cushions and the most comfortable seats on which to ride?

Railroad building, remarks a late writer, (Mr. Whiton,) may be divided into three periods,—the first, the *introductory*, in which roads were a sort of experimental enterprise, where the men who labored expected to be paid for their time or money, and were willing to wait a reasonable time for the expected profit. Second, the *speculative* period, when men were possessed with an unhealthy desire for fortune-making, and not content to wait the natural harvest of the seed sown, departed from the sound and honest principles of construction and management; trying, at first, by all sorts of pretence and misrepresentation to conceal, and last by legislation to counterbalance, the results of their ignorance and of their insane desires. Railroads were compared, as an investment, to banks; and it was even supposed that the more they cost the more they would divide; and tunnels, rock-cuts, and viaducts were then as much sought after as they are now avoided. Shrewd

and intelligent business men, who had made for themselves fortunes, embraced these ridiculous opinions, and seemed at once, upon taking hold of railroad enterprises, to lose whatever of common sense they before might have possessed; and even at the present day these same men have not the manly honesty to acknowledge their errors, but endeavor to cover them up with greater.—The third period is that of *reaction*, which embraces the present time. To a person unacquainted with the management of railroads, to see a body of men, no one of whom has ever before had anything to do with mechanical operations, assembled to decide upon the relative merits of the different plans of bridges or of locomotives or cars, upon the best means of reducing the working expenses of a machine of whose component parts they have not the slightest idea, of the most complicated and elaborate piece of mechanism that men have ever designed, might at first seem absurd; but custom has made it right. It is generally supposed that the moment a man, be he lawyer, doctor, or merchant, is chosen director in a railroad enterprise, immediately he becomes possessed of all knowledge of mechanics, finance, and commerce; but, judging from past experience, it appears in reality that he leaves behind at such time whatever common sense he perchance possessed before; otherwise why does he not follow the same correct business rules, when managing the property of others, as when he accumulated his own? A man who should show as much carelessness and ignorance, when operating for himself, as railroad directors do when operating for others, would be considered as a fit subject for an insane asylum.

When railroads are built where they are needed, at the time they are wanted, in a country able to support them, by permanent investors, and not by speculators, and are well made by good engineers, and well managed by competent men, whose interest is really connected with the success of the enterprise, then they will pay, and be railroads indeed. But so long as money is obtained on false pretenses, to be played for by State and Wall Street gamblers on the one hand, and ravenous contractors on the other hand, they will be what they are,—worthless monuments of extravagance and folly.

"Experience keeps a dear school," says poor Richard, "but fools will learn in no other."

Let not the reader think for a single moment that we have no appreciation of the labors of a De Witt Clinton, or of a Livingston,—that we at all underrate the services of the Eastern capitalists who render available the public land grants of the West, whether to build ship canals or railroads. We have the highest respect for that talent without which our Western lands would still be left to the buffalo and the deer, and the gold and silver of Europe would remain on the other side of the Atlantic. These capitalists are the mainsprings of the system; but we should no more apply their energy and skill to the detailed operation of so mechanical a structure as a railroad, than we should attach the mainspring of a watch to the hands directly, without the intermediate connecting chains and wheels.

Not less incompetent for the construction of railroads, than are the directors for the management of the completed roads, are at least one-half of the so-called engineers in America. Obligated to complete no course of education, to pass no examination, they are

at once let loose upon the country whenever they feel like it, to build what go by the names of railroads and bridges, but are in reality traps in which to lose both life and money. Indeed, any man (in the United States) who has carried a rod or chain is called an engineer; while the correct definition is, a man who has, first, a thorough knowledge of mechanics, mathematics, and chemistry,—second, the knowledge necessary for applying these sciences to the arts,—and last, the knowledge requisite to the correct adaptation of such arts to the wants of man, but, more than all, that experience which is got only from continual practice. We have such a class of engineers, and to them we owe what of fame we have in the engineering world. Second, comes another grade, men who, commencing as subordinates, without any preparatory knowledge, but with natural genius, and an intuitive knowledge of mechanics, need only to have their ideas generalized to see the bearing of their special knowledge upon the whole, in order to rank high in the profession. Third, a class who lack both natural and acquired knowledge, and whose only recommendation is that they are always for sale to the highest bidder, whether he be president, director, or contractor; sometimes working nominally for the company, but really for the contractor,—or in some cases, so debased is this class of persons, for both contractor and company openly. Of late years this prostitution of mongrel engineers has had place to an alarming extent. Let us hope that the old professional pride, and better still, a love of truth and honesty for their own sake, may yet triumph, and place real engineers high above the dead level to which ignorance and pretence and venality have degraded the profession.

OHIO AND MISSISSIPPI RAILROAD—EASTERN DIVISION.

The differences between the Ohio and Mississippi R. R. Company and the "Associates," has been amicably adjusted, and the terms of settlement ratified by the authorized representatives of the parties.

TERMS OF SETTLEMENT.

The undersigned, committees on the part of the Associates and of the Stockholders of the O. & M. R. R. Company, not having authority to adjust the accounts between the former and the Company, entertaining a difference of opinion as to the construction of the contract and the obligations of the Associates, after full examination of the accounts as presented with their vouchers, which are found to be correct, have agreed on the following as a compromise of the points of difference, and they respectfully submit the same to the Board of Directors, asking them to confirm and make it legal and binding by their examination and approval.

It is agreed:

1. The Company to assume the settlement of all outstanding claims, and the Associates released from all responsibility therefor.

2. The Associates to return \$258,000 Construction Bonds canceled, in lieu of same amount of 2d Mortgage Bonds not exchanged—to return to the Company the coupons of the 1st Mortgage Bonds, held by them to the 1st January, 1858, inclusive; also, the coupons (if any) on the Construction Bonds to the 1st September, 1857, inclusive; also, the coupons (if any) on the Income Bonds to the 1st Nov., 1857, inclusive.

3. The Associates to return an amount of Income Bonds equal to the scrip certificates already issued; also \$130,000 of the same Bonds (for cancellation), to meet the outstanding floating debt.

4. The Company to acknowledge a final balance of \$360,000 cash, 1st September, 1858, being in full settlement of all demands and accounts of each against the other.

EDWIN BARTLETT, Ch'n, } Com. on the
E. LEARNED, } part of the
S. W. COMSTOCK, } Associates.
O. M. MITCHELL, Ch'n, }
J. D. LEHMER, } Committee on
S. B. KEYS, } the part of the
D. T. WRIGHT, } Stockholders.
JOHN W. HERRON, }

SOUTHERN PACIFIC RAILROAD.

We have great pleasure in being enabled to announce that the dark clouds which, for some time past, have impended over the prospects of the Southern Pacific Railroad, and shrouded the great enterprise in gloom, are dispersing, and that again the future begins to look bright and promising. The following note, received last night by Mr. Burkardt, communicates intelligence which will impart joy and gladness to all the friends of our great Southern highway to the Pacific:

OFFICE S. P. RAILROAD COMPANY,
MARSHALL, TEXAS, Oct. 15, 1858.

Messrs. W. & H. Burkardt:—I have the pleasure of informing you that we have this day effected the compromise of our difficulties with the "New Company," upon satisfactory terms.

We truly think our difficulties are now at an end, and that all will in future be well.

Dr. Fowlkes is in fine spirits, and thinks the future success of our road beyond a doubt.

Yours, very respectfully,

D. C. WILDER, Secretary.

MONETARY AND COMMERCIAL.

The gradual increase of general business has produced a natural and gradual increase in the demand for money, nevertheless it is quite moderate, and the market easy for good paper.

In Exchange there has been no change since our last issue. The following are the rates:

	BUYING.	SELLING.
New York Sight.....	12@20 prem.	1/2 prem.
Boston.....	1/2 prem.	1/2 prem.
Philadelphia.....	1/2 prem.	1/2 prem.
Baltimore.....	1/2 prem.	1/2 prem.
New Orleans.....	1/2 prem.	1/2 prem.
American gold.....	1/2 prem.	1/2 prem.
New York 60 days.....	1@1 1/2 dis.	
New Orleans ".....	1@1 1/2 dis.	

The approaching season of the hog trade will produce a more active demand for money, and will have a healthful influence on general trade. The total number of hogs in Kentucky, as given by the "Price Current," in 1856, was 1,085,943; in 1857, 1,440,294; and in 1858, 1,107,843.

Relative to the Stock Market, the New York Courier and Enquirer of Nov. 1st, says:

"The Stock Market broke down yesterday simply because it had been built up too suddenly. The sales to-day were moderate only, in part owing to the storm prevailing. The abundance of money, added to the obvious desire for investment, will probably carry the Market up again next week. While capital is seeking employment at 5, 6, 7 per cent., as at present, it will not long remain idle, but will soon be largely invested in first class State Bonds and Railroad Mortgage Bonds. Of the latter there are large amounts available, offering ample security, which will pay seven to nine per cent. per annum on the present market price."

STOCK SALES ON SATURDAY.

On Saturday Hewson & Holmes sold at auction at the Merchants' Exchange, the following Stock, being a part of the personal estate of the late B. J. Horton:

21 Shares Covington and Lexington Railroad Stock, Shares \$50.....	6 1/2 per cent.
\$100 Burnet House preferred Stock.....	40 per cent.
100 Shares Southern Pacific Railroad Company Stock, \$3 paid.....	1/2 per cent share.
20 Shares Hillsborough and Cincinnati Railroad Stock, Shares \$50.....	1 cent per share.
100 Shares Ohio Life Insurance Company Stock, Shares \$100.....	12 1/2 cents per share.
40 Shares Silgo Marble and Mining Company Stock, Shares \$20.....	1 per cent per share.
4 Shares Dayton and Cincinnati Railroad Co. Stock, Shares \$50.....	1/2 per cent
10 Shares Junction Railroad Company Stock, Shares \$50.....	1 per cent.
20 Shares Ohio & Mississippi Railroad Company Stock, Shares \$70.....	3/4 per cent.
246 Shares Cincinnati and Chicago Railroad Company Stock, Shares \$50.....	3 cents per share.
1 Certificate for 1 share Astronomical Society Stock, Shares \$25.....	\$5
10 Shares Mercantile, Fire and Marine Insurance Company of Covington, Ky.....	Shares \$100.
1 Perpetual Scholarship on Farmers' College.....	\$10 50
\$2,000 Junction (Indiana) Railroad Company 10 per cent. Bonds, secured by Real Estate in Cincinnati.....	\$1000 each.
\$325 50 Cincinnati and Whitewater Canal Company Scrip.....	10 per cent.
10 Shares Dayton and Western Railroad Company Stock.....	5 per cent

SALES AT THE NEW YORK STOCK BOARD.—NOV. 1.

\$3,000 Ind. St. 5's.....	92
\$15,000 Tenn. State 6's, '90.....	94 1/2
10,000 Virginia 6's.....	95 1/2
91,000 Miss. 6's.....	89 1/2
5,000 U. S. 5's '74.....	104 1/2
8,000 Cal. State 7's, new bonds.....	91
5,000 Ill. Cent. R. R. B.....	95
100 Shares New York Central.....	86
100 " Illinois Cent. R. R.....	87
5 " Cleve., Col. and Cin.....	95
1294 " Galena & Chicago.....	79 1/2
350 " Pacific Mail St. Co.....	106 1/2
350 " Erie R. R.....	163 1/2
109 " Hud. River R.....	23 1/2
150 " Harlem R. R. Railroad.....	13
700 " Reading.....	52 1/2
100 " Mich. Cent.....	58
200 " Mich. S. & N. Ind.....	24

ASSETS OF THE LIFE AND TRUST COMPANY NOW IN POSSESSION OF THE SHERIFF.—The assets of the Trust Company now in possession of the Sheriff, are in figures \$1,416,866 05, but in value, as may be supposed, very materially less. The list of assets is as follows:

Individual notes, good, doubtful, and bad.....	\$318,431
TOTAL IN CASH.....	14,000 00
171 coupons, 7 per cent., Cleveland and Pittsburgh Railroad.....	5,985 00
3 bonds Knox County, O., \$100 each.....	300 00
2 Shares Cincinnati, Hamilton and Dayton Railroad.....	200 00
3 bonds Decatur Co., Indiana.....	3,140 00
10 bonds Great Western Railroad.....	10,000 00
100 bonds Norw'h and Worcester Railroad, \$100 each.....	10,000 00
1 bond Traveston Coal Company.....	1,000 00
2 bonds Ind. & C. Railroad.....	2,000 00
8 construction bonds, Ohio and Mississippi Railroad.....	8,000 00
12 bonds Hemphfield Railroad.....	6,000 00
10 bonds Toledo and Illinois Railroad.....	5,000 00
8 bonds Eldridge Freedland Railroad.....	8,000 00
38 bonds (third mortgage) Cleveland and Pittsburgh Railroad.....	38,000 00
350 shares Cleveland and Pittsburgh Railroad.....	17,500 00
13 bonds Jeffersonville, Ind.....	13,000 00
15 bonds Ft. Wayne and Southern Railroad.....	15,000 00
31 bonds Indian and Ft. Wayne Railroad.....	31,000 00
66 income bonds, Marietta and Cincinnati Railroad.....	66,000 00
20 income bonds, Cleveland and Pittsburgh Railroad.....	20,000 00
Dividend bonds of Cleveland and Pittsburgh Railroad.....	20,000 00
153 bonds (third mortgage) Marietta and Cincinnati Railroad.....	153,000 00
100 bonds Cincinnati, Hamilton and Dayton Railroad.....	100,000 00
192 bonds Hillsborough and Cin. Railroad.....	192,000 00
51 Income Railroad Bonds (with individual guarantee).....	51,000 00
67 Knox County bonds, with coupons due January 4, 1858.....	6,700 00
3 City of Cin. bonds (two coupons due)....	3,400 00
4 City of Covington bonds.....	4,000 00
9 bonds Township of Dayton.....	4,500 00
30 Henderson and Nashville Railroad bonds	30,000 00
1 bond of Fayette Co., Ky.....	1,000 00
5 bonds of Boyle County, Ky.....	5,000 00
2 bonds Clarke County, Ohio.....	2,000 00
200 bonds (4th mortgage) Cleveland and Pittsburgh Railroad.....	200,000 00
200 shares Cincinnati, Cleveland and Delhi Piqueroad Company.....	10,000 00
14 shares Madison, Peru and Indianapolis Railroad.....	700 00
771 shares Mad River and Lake Erie Railroad.....	38,500 00
60 shares Vincennes, Branch State Bank of Indiana.....	3,000 00
Total.....	\$1,416,866 05

Report of the Condition of the New Orleans and Ohio Railroad.

The undersigned Executive and Auditing Committee for the New Orleans and Ohio Railroad Company, after repeated sittings, and the most careful and anxious investigation, to ascertain the true condition of the affairs of the Company, cost of the Road so far as finished, and the resources of the Company to pay its liabilities and complete the remaining twenty miles of the Road to the Tennessee State line, submit the following report:

1. The receipts of the Company from June 18, 1853, when Hon. L. S. Trimble was elected President, and L. M. Flournoy, Esq., Treasurer, on the first organization of the Company, until 10th September, 1855, when Hon. J. Campbell was elected President, and Hon. L. S. Trimble, Treasurer, as shown by a settlement made with John Childe, General Agent..... \$94,186 86
As per settlement made with Hon. L. S. Trimble, as President, by this Committee, 5th of June, 1858..... 4,606 84

Total receipts to 10th September, 1855..... \$98,793 70

As per settlement on file with John Childe, General Agent..... \$97,199 91
As per settlement with this Commissioner, 5th June, 1858..... 4,946 95

Total..... \$102,146 86

Deduct balance due Flournoy, Treasurer, as per settlement with John Childe, General Agent, paid by J. Campbell, President, and included in his account..... \$3,013 50

Deduct for Ross & Payne's note, returned by Trimble, President, reported in settlement of June 5th, 1858, and estimated in resources of Company..... 461 10 \$3,474 60

To this add Trimble's credit for Ross and Payne's note..... 461 10

Deduct receipts to 10th September, 1855, as above stated..... \$99,133 36

Balance due L. S. Trimble, as per settlement with this Committee, June 5th, 1858..... \$339 66

There may be some errors for correction in some future settlement. There may also be some further stock receipts which have not been presented to the Committee.

The coupon account, up to September 10, 1855, remains unsettled, which must be adjusted between the county of McCracken and the city of Paducah, by their proper authorities, and the Committee of this Company heretofore appointed, before this Committee can report the same.

RECEIPTS.

From September, 10, 1855, when the Hon. Jas. Campbell was elected President, and Hon. L. S. Trimble, Treasurer:

For coupons on town and county bonds and stock, as per report of J. Campbell, President, from 10th of September, 1855 to 10th September, 1858..... \$14,544 14

As per settlement with L. S. Trimble, Treasurer, by this Committee, 1st June, 1858..... 86,403 27

For mortgage bonds, as per report, of James Campbell, President, 10th September, 1855, to 10th September, 1858..... 64,334 98

..... \$195,282 39

DISBURSEMENTS.

From 10th September, 1853, to 10th September, 1858, as per report of J. Campbell, President, on file..... \$14,544 14

As per settlement and report of this Committee with L. S. Trimble, Treasurer, 1st June, 1858..... 86,750 21

For iron and rolling stock, as per J. Campbell, President's report..... 71,235 99

..... \$202,530 34

Add for error..... 6 06

..... \$202,536 40

Deduct amount reported by James Campbell, President, passed to credit of L. S. Trimble, Treasurer as above..... \$6,068 00

Deduct for J. Campbell, President's salary, as per report..... 859 07

Deduct for balance to credit of L. S. Trimble, Treasurer, as per settlement, 1st June, 1858, of this Committee..... 336 94 \$7,254 01

..... \$195,282 39

RECEIPTS.

By G. H. Morrow, Treasurer, for earnings of Road and otherwise, from 7th June to 1st September, 1858..... \$9,481 89

Deduct for disbursements for same time, by him, as Treasurer..... 8,642 40

Balance in Treasurer's hands 1st Sept., 1858.. \$939 49

RECAPITULATION.

Receipts to 10th September, 1855.. \$98,793 70
Same from 10th September, '55, to 10th September, 1858..... 195,282 39
..... \$294,076 09

Disbursements up to 10th September, 1855..... \$98,672 26
From 10th September, 1855, to 10th September, 1858..... 195,282 39
..... \$393,954 65

Receipts over disbursements..... \$121 44

L. S. Trimble has a credit for Ross & Payne's note for..... \$461 10

Deducted from above..... 121 44

Leaves to L. Trimble's credit, as per settlement, June 5, 1858..... \$339 66

COST OF ROAD.

Disbursements, as above..... \$293,954 65

Iron and rolling stock furnished by Mobile and Ohio Railroad Company, under contract, say..... 110,000 00

..... \$403,954 65

Deduct for clearing and graduation expended between Mayfield and State line, say..... 30,000 00

Leaving for 26 miles of finished Road from Paducah to Mayfield, including depots, machine shop, right of way, rolling stock, engineering, expenses, and salaries..... \$373,954 65

Making cost of Road per mile..... \$14,344 40

ASSETS.

Twenty-six miles of finished Road, rolling stock, &c..... \$373,954 65

Amount expended for local work between Mayfield and Tennessee line..... 30,000 00

Coupon account, unsettled, supposed..... 20,000 00

Uncollected stock, good and available, estimated..... 20,000 00

\$150,000 town and county bonds, estimated at 80 cents to the dollar..... 124,800 00

Bills receivable for county and town bonds..... 3,261 10

Bills receivable for mortgage bonds..... 9,705 02

Balance in hands of Treasurer Sept. 1, '58.. 939 49

Total assets..... \$522,660 26

LIABILITIES.

Floating debt..... \$74,759 58

Ten years' 7 per cent. mortgage bonds, with coupons dated Jan. 1, 1855..... 91,300 00

Total indebtedness..... \$166,059 58

Value of Road after paying indebtedness..... 416,600 68

Bonds received by J. Campbell, President, and of John Childe, Gen. Agent, of \$1,000 each, 157 Paducah bonds..... \$157,000 00

41 McCracken city..... 41,000 00

60 from John Hancock Bank..... 60,000 00

258 bonds of \$1,000 each, amounting to..... \$258,000 00

J. Campbell, President, sold and paid to contractors: of said bonds 102, amount \$102,000, as per report, filed Sept. 10, 1855, to Sept., 1858, at various prices, averaging about 81 cents to the dollar, leaving 156 bonds estimated in assets.

It will be seen that we now have twenty-six miles of Road complete, with depot houses, machine shops, together with one first class and one second class locomotive and fourteen cars, at average expense of \$14,344 40 per mile.

We are fully justified in believing that the earnings of the Road will defray running expense and pay the interest on the mortgage bonds, which earnings will be greatly increased as the Road is lengthened.

The assets of the Company amount now to \$416,600 68 over the liabilities, and if the unexpended means of the Company were put in an available shape, with the additional aid which might be derived from an enlargement of the mortgage, your Committee do not entertain a doubt that the Road could be triumphantly completed to the Tennessee State line within the next twelve or eighteen months with home resources, without waiting for further help from the Mobile and Ohio Railroad Company, which is now not to be hoped for.

The large part of the heavy and expensive work is done on the remaining twenty miles; the Guile hill has been mainly cut through, the clearing is nearly complete, and the grading partially done. If together, it would amount to several miles, which is, however, not lost, but will be available; all of which is submitted, with the hope that the confidence in the ability and integrity of the Company will inspire a determination to proceed with the enterprise so important to the country.

R. K. WILLIAMS, }
J. B. HUSBANDS, } Ex Com.
G. H. MORROW, }

EDWARD J. MANSFIELD, C. E.

OFFERS his services on Railroads, Turnpikes, or Civil Construction. He has been employed for several years in Ohio, and Tennessee, as assistant Engineer.

Refer to—

E. D. Mansfield, } Cincinnati.
T. Wrightson, }

A. Kennedy, Iowa.

C. Davies, New York.

oct. 7-4t.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Pittsburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the State.

Feb. 16/6*

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ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

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Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer. No. 298 H Street, Washington, D. C. april 2

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July 14, 1857.

jr23-1m

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Power Mortising Machines,

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FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

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L. M. COLE,
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MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

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ON AND AFTER MONDAY MAY 10TH
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10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

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To Cleveland, Wheeling and Pittsburgh, without change of Cars

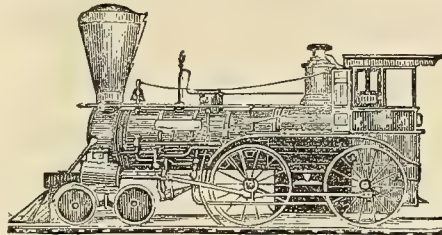
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Trains run by Columbestime, which is seven minutes faster than Cincinnati time.

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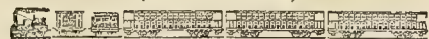
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1858 1858.

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Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

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Cincinnati, Hamilton & Dayton



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LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; a Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8:05 A. M., 2:30 and 6:10 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

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H. S. DURAND, President.

ROBERT HARRIS, Sup't.
Racine, May 15, 1857. my21

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LOCOMOTIVE ENGINES,
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RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

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WALTER McQUEEN Sup't. Aug. 14

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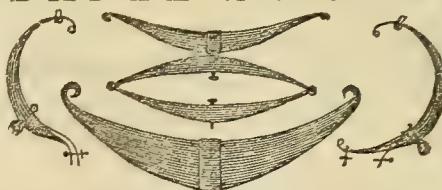
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Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to
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May 19.

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PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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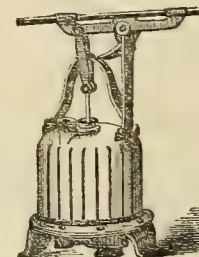
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SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also for forcing a large body of water to a great height or distance rapidly.

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SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. JULY 18, 1855

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, NOV. 11, 1858.

Railroad Record

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TO STOP A RAILROAD TRAIN.—A correspondent of the Washington, (D. C.) *Intelligencer* purposes to “stop a train of railroad cars, whatever may be its running speed,” by having an oil vessel placed in front of the driving wheels, and immediately over the rails of each side of the track, with a communicating string leading to the engineer’s stand; almost immediately a constant stream of oil could be poured on the rails, and the former motion of the train would entirely cease, when, or soon after, the last car of the train reached the oiled portion of the rails. By having another fixture, not differing materially from the first, in the rear of the hindmost car, immediately overhanging the rails on either side of the track, a stream of sand could be poured on the rails, thus preventing another train from being stopped by the cause.

AMERICAN STATISTICS—NEW YORK.

We are greatly rejoiced to know that the SCIENCE OF STATISTICS (in our opinion about to become the most important of all,) is daily gaining ground in public estimation. The Science of Man must necessarily be the most important and interesting science. But, what has statistics to do with that? Every thing. Not a single movement of the human body,—mind or society, can be ascertained, or defined without, statistics, and, in fact, the definition, condition, tendency, and movement of SOCIETY, constitutes the great center and object of Statistical Science. Hence, a great variety of researches, on a great variety of subjects enter into its problems and discussions; and these are rendered the more interesting, from the fact, that none of them are entirely solved. The solution is going on daily, and it is Statistics which is recording and systematizing the solution. In time, certain laws are deduced, and a social science is evolved, and demonstrated, which establishes all the great laws of Human Movement. This science is, and must be, the most important of all sciences. We are glad to see the American Geographical and Statistical Society take this view of the subject. It includes the raise of man, ethnology, institutions, languages, industry, commerce, and all social movements within the range of its inquiries.

Notwithstanding the great interest and importance of this subject, we believe no American State has a regular Bureau of Statistics, but Ohio. The Constitution of Ohio provided for it, and the Legislature of 1857-'8, enacted a law creating a special office and officer of Statistics. We believe Canada has a Bureau of Statistics, and that is the only other one, we know of in America. In Massachusetts a great deal of desirable statistics are obtained; but they are not systematized under one head. They are obtained by different officers, and scattered in different documents.

In New York, Statistics are better obtained, in consequence of taking a semi-decennial census, which comes between those of the U. S., and includes all branches of industry. Thus New York takes hers in 1845 and 1855. We have before us the very elaborate Report on the Census of New York in 1855, prepared in the office of Mr. Headley, late Secretary of State, by Franklin B. Hough, Secretary of the Census. The work is well done, and should reflect great honor on the compilers.

The practice of taking “Censuses” in New York is very old, and affords an opportunity of contrasting the population at different periods, during nearly two hundred years. The first census appears to have been taken in 1698, and to have been repeated, at short intervals, ever since. The results were:

	Total.	Negroes.
In 1698	13,667	2,170
In 1714	22,018	2,414
In 1723	40,524	6,171
In 1731	50,824	7,763
In 1737	60,477	8,911
In 1749	77,318	10,492
In 1771	163,337	19,663
In 1790	319,627	25,978
In 1810	519,049	40,350
In 1830	1,518,618	44,845
In 1850	3,067,394	49,069

In the above table, there are two curious things to be noted; the rapid progress of the whole population, and the rapid diminution of the black population, were, proportionably.

In 1698, the colored people were about 12 per cent.; in 1737, (about forty years after,) they were 15 per cent. This was the highest point; for, in 1771, they had fallen back to 12 per cent. In 1810, they were but little more than 4 per cent. In 1830, but 2½ per cent.; and in 1850, but 1½ per cent!

In a rapidly growing white population, and no importation of blacks, the race must rapidly diminish, till it perishes. Amalgamation may have some influence in causing this; climate has much more; but, above all, the crushing effect of a superior race on an inferior.

The rapid increase of the white population is equally remarkable the other way. Taking, for example, just one century, at equal periods, we have these results:

From 1749 to 1771	125 per cent.
“ 1771 to 1790	95 “
“ 1790 to 1810	200 “
“ 1810 to 1830	100 “
“ 1830 to 1850	60 “

The second of these periods was that of the Revolutionary War, in which it was natural the progress of population should, in some degree, be checked. After 1810, the population became too large to allow of such an enormous increase as occurred between 1790 and 1810.

By the Census of 1855, it appears, that the growth for five years was 12 per cent. It is not likely to be any more; but rather less in future. This would give about 50 per cent. for twenty years. This would give New York a population of 4,500,000 in 1870—a result quite likely to be reached.

The ages of population is another curious feature in the census tables. In 1855, there were, in New York, ninety-one persons over one hundred years of age. It is a defect of the census, that, as this was so small a number, the ages of each one was not given. It would be interesting to know what the precise age of these persons was.

An interesting problem is to know what is *middle life*? It should be exactly at that point, where the numbers of the living, below and above, are exactly equal. *Middle life* to one who is just born, is above twenty two years of age; but, what is middle life to one who reaches that period? Middle life to him is just below forty years. But, when he passes that period, it is hardly fifty. Thus, as a man stands amidst different classes of age, his *future middle life* is a moveable period.

The proportion of those born in different regions, stand as follows:

In the city, those born in New York State amount to 262,156; those born in the United States, amounts to 303,721; those born in England, to 22,731; in Scotland, 8,487; in Ireland, 175,735; in Germany, 95,986; in Prussia, 1,586; in Poland, 1,200. Or, of the city's inhabitants—

There were born in it.....	64.05	per 100
In the United States.....	72.93	" 100
Foreign.....	16.58	" 100

In illustrating the modes in which immigrants landing on our shores dispose of themselves, we find that there remain in the city of the English, 22.19; Prussian, 24.9; Scottish, 30.85; Irish, 35.1; Poles, 77.77 per 100.

As to the conditions of life there are in the State—

Unmarried.....	60.08	per 100
Married.....	35.15	" 100
Widowers.....	1.02	" 100
Widows.....	2.75	" 100

In Great Britain of these classes are unmarried—

Males.....	63.12	per 100
Females.....	60.35	" 100
Married males.....	19.33	" 100
Females.....	22.24	" 100

As to habitations, it is found that for each dwelling in the city, there are 14.79 persons; in the State, 6.64; in the United States, 5.94. As compared with preceding eras, these numbers have been on the increase.

Of families, each in the city contains on an average 4.97 persons; in the State, 5.23 persons. These numbers appear to be on the decrease.

The Social Statistics taken under the New York census, appear to be altogether defective. Thus, the whole number of marriages given for the State of New York is 21,551—which is not equal to the number returned for the State of Ohio, by the Commissioner of Statistics, although Ohio contains but two-thirds the number of people. In detail, we have 2,852 marriages returned for the city of New York, while 2,750 were returned for Hamilton county, Ohio, containing not half the number of inhabitants.

So, also, of the reported number of deaths. The whole number reported for the State of New York is 46,297, which makes 1 in 75,—a proportion altogether too small. The magnitude of the error, however, is disclosed by the return from the city of New York, which is 11,022, but little over half the number returned by the City Inspector.

Notwithstanding these errors, there are, in these returns, some valuable facts. For example, the proportion of ages and diseases are no doubt nearly correct. Thus, the proportion of those who die under five years of age is 36 per cent. The proportion of those, who die between five and fifteen is only five per cent. The proportion between fifteen and forty-five is thirty per cent. These ratios are interesting, and might be made much

more so, and more correct, if the ages of death were arranged more naturally. In taking the ages of deaths, the census divisions should not be followed, because they are not natural.

The ages at which deaths take place should be classified thus:

Under.....	1 year.
Between.....	1 and 7 years.
".....	7 and 15 "
".....	15 and 22 "
".....	22 and 50 "
".....	50 and 70 "

This would accord very well with the natural epochs of life, and would present certain scientific laws of life and mortality, which would be valuable to society.

We must here arrest our pen, and return to the subject again.

THE FAILURES OF 1857 AND 1858.

This is a very interesting subject. We extract from the New York *Economist*. It appears, from the facts presented, that in six months of 1858, there were 996 failures, and in the whole year, 1857, 6,022; which indicates not more than one-third the failures in 1858, which existed in 1857. The greater part of those in 1857, occurred in the last four months, when the storm following the failure of the Ohio Life and Trust Company swept over the country. The amount of money involved appears to be not more than one-seventh. Looking over the lost, it will be seen, that the mass of failures are in the great commercial cities. This must necessarily be the case, since few failures are noted except those of merchants.

The failures for the year 1857 to January 1858, were reported by the Mercantile Agencies, as follows:

	McKillop.	Douglas & Co.
No. firms.....	227,048	212,364
No. failed.....	6,022	5,123
Liabilities.....	\$282,325,000	\$299,801,000

Thus out of 212,264 firms on the books of Douglas & Co., 5,123 failed, owing \$299,801,000. Most of these were in the last part of the year, when the panic commenced. The average amount was about \$60,000. During the six months which have elapsed to Oct. 1, 1858, the number of failures has been 952 for the whole Union, with liabilities for \$20,750,150, or \$20,000 average. In New York city the report for 1857, and for six months of 1858, was as follows:

1857.....	268	\$95,454,000
1858—six months.....	59	2,865,000

The average for the last six months is \$50,000 each firm, while in 1857 the average was \$363,000. Those who have gone down this last six months are they whose affairs have not improved by the lapse of time since the panic. A large amount of extended paper has matured, however, and to all appearance been met, while the failures, as we see, are comparatively small. The failures in each

State, as compared with last year's return, are as follows:

LIST OF FAILURES FOR THE YEAR 1857.

	Number of firms.	No. of failures reported.	Amount of probable figures.	Average of payments.
New York City.....	14,176	268	\$96,454,000	37c.
New York State.....	18,984	777	21,524,000	41
Philadelphia.....	7,223	317	25,162,000	28
Pennsylvania.....	15,202	216	5,133,000	24
Boston.....	5,420	204	52,231,900	46
Massachusetts.....	14,198	224	2,423,000	22
Baltimore.....	2,110	72	4,119,600	29
Maryland.....	3,502	20	6,000,000	25
Alabama.....	2,804	22	262,000	44
Arkansas.....	1,190	18	423,000	50
Connecticut.....	5,123	86	1,415,000	48
Delaware and District of Columbia.....	3,513	25	324,000	47
Florida.....	792	7	250,000	50
Georgia.....	5,538	56	1,017,000	23
Illinois.....	12,957	162	6,713,000	40
Iowa.....	4,614	262	1,610,000	41
Indiana.....	7,614	191	1,476,000	26
Kentucky.....	6,580	96	2,237,000	34
Louisiana.....	3,813	74	7,213,000	42
Maine.....	7,195	92	1,712,000	51
Michigan.....	4,420	168	3,113,000	28
Minnesota.....	.....	.....	.....	.....
Mississippi.....	2,412	14	493,000	28
Missouri.....	6,727	24	6,319,000	37
New Hampshire.....	3,251	64	892,000	51
New Jersey.....	4,393	118	1,928,000	34
North Carolina.....	2,412	65	415,000	46
Ohio.....	18,292	467	5,475,000	25
Rhode Island.....	2,213	41	4,733,000	47
South Carolina.....	3,413	65	1,412,000	43
Tennessee.....	4,294	59	874,000	45
Texas.....	2,616	13	377,000	30
Vermont.....	2,805	94	617,000	52
Virginia.....	9,224	123	1,925,000	45
Wisconsin.....	4,628	219	1,945,000	50
Territories.....	2,727	70	1,714,000	25
Br. Provinces.....	10,112	197	8,118,000	..
Total.....	227,048	6,022	292,335,000	..

List of Failures in the States and Territories from April 1, 1858, to October 1, 1858.

	Failures reported.	Amount of Liabilities.
New York City.....	58	\$2,885,000
New York State.....	161	2,131,000
Philadelphia.....	23	1,104,000
Pennsylvania.....	46	9,500,000
Boston.....	14	750,000
Massachusetts.....	12	290,000
Baltimore.....	29	850,500
Maryland.....	6	91,000
Alabama.....	8	101,000
Arkansas.....	6	126,000
Connecticut.....	18	270,500
Delaware and District of Columbia.....	11	131,000
Florida.....	5	125,000
Georgia.....	16	273,000
Illinois.....	79	1,224,000
Iowa.....	52	150,000
Indiana.....	55	665,500
Kentucky.....	25	524,000
Louisiana.....	8	660,000
Maine.....	12	145,000
Michigan.....	21	260,000
Minnesota.....	25	561,000
Mississippi.....	6	174,000
Missouri.....	33	1,650,000
New Hampshire.....	10	86,000
New Jersey.....	18	162,000
North Carolina.....	20	350,000
Ohio.....	110	1,266,000
Rhode Island.....	.....	.....
South Carolina.....	11	297,000
Tennessee.....	33	1,556,500
Texas.....	7	149,000
Vermont.....	9	172,400
Virginia.....	44	660,000
Wisconsin.....	31	217,500
Territories.....	7	121,000
Br. Provinces.....	44	968,000
Total.....	996	\$21,718,160

The stoppages at the South are small. At the East, on the other hand, they are considerable.

GREAT WESTERN & ATLANTIC R. R.

Since we wrote our article on this subject, the newspapers have had much controversy about it. We stated precisely what we thought of the importance of the work, and the means of accomplishing it. Our views of the latter were based entirely on the representations made in the reports, and the news-

MANASSAS GAP RAILROAD.

Eighth Annual Meeting of the Stockholders of the Manassas Gap Railroad Co.

The Stockholders of the Manassas Gap Railroad Company, met at Liberty Hall, in this city, yesterday, at 12 o'clock, M., and organized by appointing Naason Bare, Chairman. Edward Green, Secretary of the Company, acted as Secretary of the meeting.

On motion of J. S. Davison, a committee of three was appointed by the Chair to examine proxies, and ascertain if a quorum of the stock were present.

The Chair appointed the following gentlemen to compose the committee: J. S. Davison, of Warren; W. G. Stevens, of Rockingham, and Dr. R. C. Ambler, of Fauquier.

The committee retired, and after examining all the proxies, reported to the meeting that a large majority of the stock was represented; that there were some slight informalities in some of the powers of attorneys, but that the committee deemed it proper to overlook these, and accept all.

The report was unanimously adopted.

Mr. Pittman gave notice that he should move that the order requiring the printing of the reports of the officers before the meeting, should be rescinded.

On motion of J. S. Davison, the meeting then took a recess until 7½ o'clock, P. M.

At 7½ o'clock, the meeting re-assembled, when the report of the President, and accompanying documents, were read as follows.

PRESIDENT'S REPORT.

To the Stockholders of the Manassas Gap Railroad Company:

The President and Directors of the Manassas Gap Railroad Company, respectfully present to the Stockholders, this, their eighth annual report:

The tonnage and travel of the past year, ending the 30th September, 1858, were diminished by bad crops and scarcity of money. The amount of tonnage was reduced twelve per cent.; travel thirteen and a half per cent. Both eastward and westward transportation suffered. The heavy articles of wheat, flour, and iron, bound eastward, and plaster, etc., etc., going westward, were all brought in smaller quantities.

The loss of revenue accruing from this cause, was made up in part by higher charges on transportation, but mainly by lessened expenses, which enabled the road to maintain average net income:

Net (expenses deducted) for the year 1855-56..	\$38,943 12
Do. do. do. do. 1856-57..	38,187 51
Do. do. do. do. 1857-58..	38,801 34

The bad crops of wheat have subjected Manassas to a severe test, which the comparison of the two years 1853 and 1858 will serve to illustrate. In the year 1853, Markham was the terminus of the road. At this point the drought of the business of the road was confined to the Piedmont country, not being in reach of the Valley counties. In the year 1858, the terminus of the road was Woodstock, when the road drew the trade of the added counties of Warren, Page, Shenandoah, and Rockingham, with parts of Clark, and Frederick, all eminently productive wheat counties. The calculation was fairly made that these counties would treble the amount of wheat and flour transported over the road when at Markham. Whereas, the result is as follows:

Flour and Wheat (converted into corn) shrouth over the road in 1853, was.....81,532 bbls. flour.
Flour and wheat (converted into flour) brought over the road in 1858, was..68,161 " "

Falling off.....13,691 bbls.

The fact that the amount of wheat transported in 1853, when the road had its terminus at Markham, and its business was limited to the Piedmont country, was larger by 13,691 bbls. of flour, or its equivalent of 68,891 bushels of wheat, than in 1858, when the terminus was at Woodstock, and the road drew both from the Piedmont country and large valley counties added, demonstrates the almost complete failure of the crop which formed the business of the year just past, and explains the causes of the curtailed operations of the road. The wheat crop is the great staple of the entire section of the country through which Manassas passes, and the failure of the crop not only diminishes the tonnage in wheat and flour, but by contracting the means of the farmer, lessens his consumption of merchandize and agricultural supplies; its loss comes home to every farmer and merchant, and is now felt everywhere, in the cramped finances of the one, and the short ledger of the others. This adversity brings with it, however, the consolatory reflection, that in having passed safely through so severe an ordeal, Manassas has established her self-sustaining capacity. Manassas has no great connection by which the failure of one section is made up by the success of another. A freight road, and local in its character, Manassas has no relief from the extremes of the seasons which attach to localities. It is, therefore, valuable to the interests and permanence of the enterprise, that at the lowest probable point of productiveness, Manassas has shown that she can maintain herself and her credit, and has given the further assurance that when the country returns to its natural standard of productiveness. Manassas will give good account of herself in her greatly improved business and increased revenues.

The improved condition of the Finances of the Company is a subject of congratulation.

The beneficent legislation of the General Assembly, by its direct assistance, together with the infusion of improved credit which that assistance gave the Bonds of the Company, has started the work again, and put the debt in a manageable shape. With the means derived from this appropriation, and sale of Company bonds, the board has purchased materials to lay the track to Mount Jackson, as well as reduce the floating debt from the sum of \$550,000—amount of floating debt of the year previous—to \$300,000, with a prospect of further reduction to \$225,000, when the remaining instalment receivable under the act of January next is paid.

In 1857, whole debt.....	\$725,000
Do. Floating.....	\$350,000
Do. Funded.....	175,000
Total.....	\$25,000
In 1858, whole debt.....	\$650,000
Do. Floating.....	\$225,000
Do. Funded.....	418,000
Total.....	\$646,000

The reduction of total indebtedness of the Company, together with the change of proportions of floating and funded debt, has very decidedly lessened the amount wanted for payment of interest; and, at the same time, the extension of the road to Mount Jackson will give increased means of raising the money wanted for this purpose. The interest

on the debt as stated, floating and funded, will be \$50,000—about 7½ per cent. The sum of \$50,000 wanted for payment of interest, exceeds by \$12,000 the net income of the earnings of the road, which is said to be \$38,000. The deficiency will be made up by the increased receipts of the road when running to Mt. Jackson. This result being a fair inference, from the fact that the extension of the road from Strasburg to Woodstock, a distance of twelve miles, produced an increase of receipts amounting to \$19,000. The road at Mt. Jackson will better command the trade of the Valley, and occupies, also, a position of much greater local development.

The floating debt has been funded by the sale of Company bonds at a low figure. Most reluctantly the board has been forced, by the despotism of circumstances, to submit to this loss. Pressed for payment, and without means, except these derived from the sale of bonds themselves, or having them sold by the creditors of the Company. Compelled, therefore, to go into market, submission to market prices was a necessary consequence.

Manassas could exhibit as her basis of credit, only a revenue crippled by short crops, and was forced to take a lower range of prices than Companies with more ample revenues.

The floating debt of the Company should be extinguished, partly because payment is demanded, and in part that the rate of interest is so much higher upon the floating debt, as to make it prudent that it should be funded. The prospect is that in future the exchange can be effected with improved prices for the bonds, because of the better revenues of the Company, and the reduced debt requiring the sale of a less number of bonds, and diminished urgency for their sale.

The board has every reason to justify their confident expectation that the road will be completed as far as Mt. Jackson, early in December. The cross-ties are now laid within three or four miles of this point, and the rails are confidently expected to arrive in the course of the month of November—the laying upon ready cross-ties requiring but little time. The rails are the best Welsh manufacture, and will cost the Company, all expenses paid \$43 60 a ton.

The completion of the road to Mt. Jackson, is cause of congratulation, for several reasons. It is the end of all the very expensive work on the road to Harrisonburg; it is a point of greatly improved accommodation to the trade of the county of Rockingham, and by improving the revenues of the Company, it gives relief from the thralldom of a pressing debt.

Mt. Jackson, located on the Valley Turnpike, which has a South-western direction to Harrisonburg and Staunton, will also draw to it the trade of Page county on the East, by a metalled road leading to Luray, and will draw a large portion of the business of Pendleton and Hardy counties on the West by a graded road now being made to Moorfield. The location of Mt. Jackson and also of Edinburg, constitute points of striking local development. Situated on two considerable streams, Stony and Mill Creeks, near their junction with the Shenandoah, they are surrounded by bottom lands renowned for productiveness in corn and other articles too bulky for wagon transportation even as far as Woodstock, by great water power, by exhaustless stores of iron imbedded in the

neighboring hills, and abundant supplies of lumber furnished from the boundless forests which cover the mountains that encompass the valley.

The completion of the road from Mount Jackson to Harrisonburg, will be anxiously pressed by the Board. There are one or two points which will require length of time for their completion, and the Court of Rockingham, all the Magistrates of the county present, expressed the wish, that the Company would use the county bonds, in the immediate prosecution of this particular work. The Board deeply regret their inability with their limited means to do more work than that adverted to. It is, however, a pleasing reflection that the completion of the road to Harrisonburg will not require a large sum. An appropriation of \$250,000 by the State will close this work.

On the work of the Independent Line, and Loudon Branch, as we stated in the report of the Board of last year, the graduation and masonry have been more than half finished. The completion of the work, superstructure and grading, will require \$900,000—a sum greatly exceeding the means of the Company; and although the way of its accomplishment is now dark, yet, a persevering will may find the way; it is a just source of confidence that the past achievement of the Company, authorizes the conviction that the entire completion of this work is a question of time and not of fact.

By order of the Board:

EDWARD C. MARSHALL,
President.

CONCLUDING PROCEEDINGS.—At a meeting of the Company on Thursday night, the reports of the President and Chief Engineer were, at the suggestion of Mr. Marshall, referred to a committee of five appointed by the chair, as follows: John H. Wartmann, of Rockingham; J. H. Williams, of Shenandoah; George Bryan, of Alexandria; B. E. Harrison, of Prince William; and J. W. Foster, of Fauquier.

On motion of J. W. Foster, the report of the Examining Committee was received and adopted.

On motion of Mr. Wartmann, seconded by Mr. Pittman, EDWARD C. MARSHALL was unanimously re-elected President of the Company for the ensuing year.

HIRAM MARTS, of Rockingham, and B. H. LAMBERT, of Alexandria, were unanimously re-elected Directors on the part of the Stockholders.

RAILROADS IN RUSSIA.

Correspondence of the N. Y. Tribune.

ST. PETERSBURG, July, 1858.

On the northern side of the city, just outside the low earthen barrier, stands the great Railroad Station. The principal train for St. Petersburg leaves daily at noon, and reaches its destination the next morning at eight—600 versts, or 400 English miles, in twenty hours. The fares are respectively 19, 13 and 9 rubles, for the first, second and third class. The station building is on the most imposing scale, and all the operations of the road are conducted with the utmost precision and regularity, although perhaps a little slower than in other countries. The first class carriages are divided into compartments, and luxuriously cushioned, as in England; the second class are arranged exactly on the American plan (in fact, I believe they

are built in America,) except that the seats are not so closely crowded together. The entrance is at the end, over a platform on which the brakeman stands, as with us. As the day of our departure happened to be Monday, which is considered so unlucky a day among the Russians that they never travel when they can avoid it, there was just a comfortable number of passengers. We bade adieu to our obliging friend, Col. Claxton, whose kindness had contributed so much to the interest of our visit, and, as the dial marked noon, steamed off for St. Petersburg.

Straight as sunbeams, the four parallel lines of rail shoot away to the north-west, and vanish far off in a sharp point on the horizon. Woods, hills, swamps, ravines, rivers, may intersect the road, but it swerves not a hair from the direct course, except where such deflection is necessary to keep the general level between Moscow and the Volga. After passing the Valdai Hills, about half-way to St. Petersburg, the course is almost as straight as if drawn with a ruler for the remaining two hundred miles. The Russians say this road is only to be looked upon as an article of luxury. The Emperor Nicholas consulted his own convenience and the facility of conveying troops rather than the convenience of the country and the development of its resources. By insisting upon the shortest possible distance between the two cities, he carried the road for hundreds of versts through swamps where an artificial foundation of piles was necessary; while, by bending its course a little to the south, nearer the line of the highway, not only would these swamps have been avoided, but the cities of Novgorod, Valdai and Torshok, with the settled and cultivated regions around them, would have shared in the advantages and added to the profits of the road.

In its construction and accessories, one can truly say that this is the finest railway in the world. Its only drawback is an occasional roughness, the cause of which, I suspect, lies in the cars rather than the road itself. There are thirty-three stations between Moscow and St. Petersburg. At the most of these, the station-houses are palaces, all built exactly alike, and on a scale of magnificence which scorns expense. A great deal of needless luxury has been wasted upon them. The bridges, also, are models of solidity and durability. Every thing is on the grandest scale, and the punctuality and exactness of the running arrangements are worthy of all praise. But at what a cost has all this been accomplished! This road, 400 miles in length, over a level country, with very few cuts, embankments and bridges, except between Moscow and Tver (about one-fourth of the distance,) has been built at an expense of 120,000,000 of rubles (\$90,000,000,) or \$225,000 per mile. When one takes into consideration the cheapness of labor in Russia, the sum becomes still more enormous.

The work was not only conducted by American engineers, but Mr. Winans, the chief engineer, is at present carrying on the running business under a contract with the Government. His principal assistants are also Americans. This contract, which was originally for ten years, has yet three years to run, at the end of which time Mr. Winans will be able to live upon what he has earned. His annual profit upon the contract is said to be one million rubles. Some idea of its liberal character may be obtained from the fact that his allowance for grease alone is three silver copecks a verst for each wheel—about $3\frac{1}{2}$ cts.

a mile; or, with an ordinary train, some \$700 for the run from Moscow to St. Petersburg. His own part of the contract is faithfully and admirably discharged, and he is of course fairly entitled to all he can make. It is not to be wondered at, however, that the receipts of the road last year exceeded the expenditures by a few thousand rubles only.

The fact is, even yet, the road does not appear to be conducted with a view to profit. The way traffic and travel which railroad companies elsewhere make it a point to encourage, is here entirely neglected. There are none but through trains, and but a single passenger train daily. Beside this, no freight is taken at the way stations, unless there happens to be a little room to spare, after the through freight is cared for. Tver, through which the road passes, is at the head of navigation on the Volga, and, after Nijni Novgorod, the chief center of trade with the regions watered by that mighty river, as far as the Caspian Sea; yet, I am informed, there is no special provision made for affording the facilities of communication which this place so much needs.

Russia, however, is soon to be covered with a general system of railroad communication, which, when completed, must exercise a vast influence on her productive and commercial activity. A road from Moscow to Nijni Novgorod on the Volga, where the grand annual fair is held, has been commenced, and will probably be finished in from three to five years. The distance is about 250 miles, and the estimated expense \$50,000 per mile. The road from St. Petersburg to Warsaw—a little over 700 miles in length—has been in progress for some years past, and will be finished, it is said, by the close of the year 1860. In September it will be opened as far as Pskov (German, "Pleskow") at the head of Lake Peipus, and to Dwinaburg, whence a branch road to Riga is now building, in the course of next year. Near Kovno it will be intersected by another branch from Königsburg, via Tilsit and Gumbinnen, whereby there will be a direct communication between St. Petersburg and Berlin.

The other projected roads, the building of which has been contracted for by a French company, but not yet commenced, are from Liban, on the Baltic, easterly through Witepsk and Smolensk to the large manufacturing town of Tula, 112 miles south of Moscow; and another from the latter city to Charkoff, in the Ukraine, with branches to Odessa and the Crimea. The former of these will be nearly 700 miles in length, and the latter at least 1,000. The cheapest plan for the Russian Government to build railroads, would undoubtedly be, to permit the formation of private companies for that purpose. In Middle and Southern Russia, the cost of construction would certainly be no greater than in Illinois, where, if I remember rightly, the roads are built for half the amount of the lowest estimate I have heard here. The effect of these improvements upon the internal condition of Russia can hardly be overvalued. They are in fact but the commencement of a still grander system of communication, which, little by little, will thrust its iron feelers into Asia, and grapple with the inertia of four thousand years.

—To return to our journey. The halts at the way stations were rather long—five, ten, fifteen minutes, and at Tver, where we arrived at five o'clock, half an hour for dinner. In this respect, as in every other, the arrangements were most convenient and complete.

We had a good meal at a reasonable price, and were allowed a rational time to eat it. At every one of the other stations there was a neat booth provided with beer, quass, soda water, lemonade, cigars and pastry. Most of the passengers got out and smoked their cigarettes at these places, as the practice is not allowed inside the cars. There is a second-class carriage especially for smokers, but one is obliged to take out a license to smoke there, for which he pays ten rubles. The Russians are nearly all smokers, but the custom is very strictly prohibited in the streets of cities, and even in the small country villages.

The country, slightly undulating in the neighborhood of Moscow, becomes level as you approach the Volga. The monotony of which I have spoken in a previous letter, is its prevailing characteristic. Great stretches of swamp or of pasture ground, fields of rye and barley, and forests of fir and birch, succeed one another in unvarying sameness. Now and then you have a wide sweep of horizon—a green sea, stretched with rosy foam-drifts of flowers—a luxuriant Summer tangle of copse and woodland, or a white village church, with green domes, rising over a silvery lake of rye; and these pictures, beautiful in themselves, do not become less so by repetition. The Volga is certainly the most interesting object in the whole course of the journey. Tver, a city of 20,000 inhabitants, on its right bank, is conspicuous from the number of its spires and domes. Along the bank lie scores of flat-bottomed barges, rafts and vessels of light draught. The river here is scarcely so large as the Hudson at Albany, flowing in a sandy bed, with frequent shallows. But, like the Danube at Ulm, it is not the smallness of the stream which occupies your thoughts. You follow the waters, in imagination, to the old towns of Yaroslav and Nijni, Novgorod, to the Tartar Kazan and the ruins of Bulgar, through the steppes of the Cossacks and Kirghizes, to the Caspian Sea and the foot of ancient Caucasus.

The sky was heavily overcast, so that, in spite of our high latitude, the night was dark. I therefore did not see the Valdai hills, which we passed toward midnight—the only real hills in Russia proper, west of the Ural Mountains. It was among these hills that Alexander I. intrenched himself, to await Napoleon. When the morning twilight came, we were in the midst of the swampy region, careering straight forward, on and on, over the boundless level. The only object of note was the large and rapid river Volchoff, flowing from the Ilmea Lake at Novgorod northward into Lake Ladoga. The road crosses it by a magnificent American bridge.

Some fifty or sixty versts before reaching St. Petersburg, we passed through a large estate belonging to the rich Russian, Kokoreff, who has lately been distinguishing himself by the prominent part he has taken in all measures tending to the improvement of his country—the emancipation of the serfs, the steamboat companies of the Dneiper and Dneister, the formation of a moneyed association for encouraging manufactures, etc. This Kokoreff was the son of a common peasant, and commenced life by keeping a cheap brandy-shop. He gradually prospered, and, being a man of much natural shrewdness and energy, took the contract for the brandy revenue of the whole Empire, which is farmed out. He is worth about seven millions of rubles, much of which he has invested in landed property. He has now set himself to

work to introduce improvements in agriculture, and his estate presents a striking contrast to that of his neighbors. Neat, comfortable houses for the laborers, spacious barns for the grain, forests trimmed and protected, meadows drained, rough land cleared and prepared for culture—these were some of the features which struck my eye, as we rushed along. Kokoreff is charged by some with being extravagant and fantastic in his views, and, therefore, an unsafe example to follow; but a man who makes such an employment of his means, can not do otherwise than work real and lasting good for his country.

By and by vegetable gardens succeed to the swamps, villages became more frequent, houses, smoking factories and workshops on our right, then a level, uniform mass of buildings, over which towered some golden-tipped spires, and at eight o'clock, precisely, we landed in the station at St. Petersburg.

B. T.

HARTFORD, PROVIDENCE AND FISHKILL RAILROAD COMPANY.

The annual meeting of the stockholders of this company, for a choice of directors, &c., was held at the office of this company, yesterday afternoon. There was a good attendance, 9580 shares of stock being represented, being nearly half the entire stock list.

The meeting was called to order by the President of the road, Byron Sprague, Esq., of Providence. The reading of the report of the directors and trustees was dispensed with, printed copies of which, in pamphlet form, being provided for those present.

A committee of five, to nominate a ticket of Directors to be presented to the meeting, was appointed, consisting of Messrs. Samuel Currie of Providence, Alfred Smith of Hartford, Geo. B. Holmes of Providence, Joseph Trumbull of Hartford, and Daniel Gallup of Plainfield.

Geo. M. Bartholomew, Lyman B. Frieze, and E. M. Bridgman were appointed committee on proxies and to receive and count the votes.

The following resolutions were introduced by Mr. Currie of Providence, and passed by a ye and nay vote:

Resolved, That the Directors of this Company are hereby authorized in their discretion, to make and issue, in payment of the existing floating debt of this Company, the bonds of the Company bearing a rate of interest not exceeding three per cent. semi annually, to be executed and attended by such officer or officers of the Company, and to be payable and redeemable at such time or times and upon such terms and conditions as the Directors may appoint; and for securing the payment of said bonds, to pledge or hypothecate by way of mortgage, trust or otherwise, the whole or any portion or portions of the railroad of this Company, with any or all of its privileges, appendages, appurtenances, improvements, cars, engines, real and personal estate, and other property, franchises and chartered rights of the Company, and whether the same shall be vested in this Company at the time of the execution of such hypothecation or mortgage, or be afterwards acquired; and the said Directors are hereby authorized, in their discretion, to apply to the Legislature of the States of Rhode Island and Connecticut, or either of them, for such enabling act or acts as may be deemed necessary or expedient to make such mortgage secure and valid.

Resolved, That the Directors of this Company are hereby authorized to compromise the suit now pending against Charles T. James, upon his subscription to the stock of this company, upon such times and conditions as they may deem expedient.

The committee to nominate a Board of Directors, retired for consultation, and soon afterwards reported the names of the following gentlemen for Board of Directors:

Byron Sprague, James G. Anthony, Henry Lippitt, Providence; Stephen Harris, Phoenix, R. I.; Wm. Sprague, Providence; Jos. Trumbull, Alfred Smith, Albert Day, A. S. Beckwith, Edson Fessenden, Hartford; John P. Elton, Waterbury Ct.

The above named gentlemen were elected by an almost unanimous vote, the stockholders voting according to the number of shares of stock held.

After the adjournment of the meeting, the Directors met and re-elected Byron Sprague President of the Company, and E. M. Bridgman Secretary and Treasurer.

The following is a condensed statement of the financial Condition of the Company on the 1st of October, 1858:

ASSETS.	
Construction, cost of road from Providence to Waterbury, 1½ miles.....	\$3,963,475 46
Equipment.....	23,510 93
Total cost of road and equipment.....	\$4,005,986 39
Materials on hand, wood, &c.....	29,348 20
Sinking Fund, cities of Hartford and Providence.....	48,777 14
Sundry notes and accounts....	6,917 09
	\$4,308,307 25
LIABILITIES.	
Old stock issued.....	\$1,537,939 58
Preferred stock sold.....	378,810 00
Bonds sold.....	1,662,730 00
Sundry notes and accounts payable.....	319,961 78
	\$4,119,441 76
Excess of assets.....	\$188,865 59

The road is in the hands of Trustees for the mortgage holders, under the respective deeds of trust in Connecticut and Rhode Island, but by mutual agreement, the Trustees are operating the road as a whole from Providence to Waterbury. The operating expenses have been reduced to 52½ per cent. of the gross earnings of the last eight months and to less than 50, as compared with the earnings of the last three months. The Directors avow their belief, that the road being economically managed, will, 1st, Pay in full the current and back interest on its mortgage bonds, and in due time pay the principal of said bonds in full; 2d, Will pay in full, with interest, all the floating debts of the Company; 3d, Will pay dividends on the preferred stock after the floating debt is paid off; 4th, After some years a small but steadily increasing dividend on the original stock may be expected; but if the creditors force the Company into bankruptcy, and compel a sale of the road, the above results can not be worked out. It is hoped that in view of the interests of all parties, creditors will be indulgent.

The Acting Trustee and General Agent of the Road, (D. F. Robinson, Esq.) informs the Company, that the Trustees of the Mortgage Bondholders took possession of the road as above stated, Feb. 1st 1858, and that they have endeavored to curtail every expense, consistent with the safety of the road and sound economy. They were not able, as they hoped in March and April they would be, to pay the July interest; but they now expect that the net earnings of the road for the year ending 1st Feb., will at least equal the current expenses and one year's interest on the bonds. Bonds for \$52,230 fall due July 1st, 1859, issued on a mortgage prior to that under which the Trustees hold on the road from Hartford to Willimantic. The interest on these bonds was paid last July, and the Trustees expect to begin paying the interest on all the bonds, January 1st, 1859, to pay the coupons as they fall due thereafter, and the \$52,230, when they mature. Mr. Robinson acts for the Trustees in Connecticut and Rhode Island, and is the General Agent for the entire road. He presents the following encouraging statement of the earnings and expenses of the road since it came into his hands:

Statement of Earnings and Expenses for the eight Months ending Sept. 30th, 1850.

	Gross earnings.	Expenses.	Net earnings.
February.....	\$14,690	\$11,310	\$3,380
March.....	22,153	10,427	11,726
April.....	34,392	13,178	21,214
May.....	27,919	13,282	14,637
June.....	23,143	13,011	10,132
July.....	18,055	13,045	5,010
August.....	29,612	13,013	16,599
September, about...	30,000	13,800	16,200
	\$194,934	\$102,326	\$92,608
Deduct from net earnings.....			\$2,519 72
Not included in expenses.....			\$90,088 88
			Courant.

GOLD HUNTING AND GEOLOGY.

BY DAVID CHRISTY.

Within the last ten years a series of excitments in relation to discoveries of gold, have occurred in Ohio, Indiana and Iowa. In nearly every instance some gold was found, but the locality soon became exhausted, and disappointment followed. None were ever paid for their labor. The question naturally arises, if some gold has been found in the states named, why may it not exist there in quantities, as well as in Carolina, Georgia and California? It may be well to answer this question in the light of Geology.

All gold and silver is derived from veins in fissures in the rocks, which have been filled with these metals from the interior of the earth. These veins never exist, except in regions where there has been much disturbance of the earth's crust by volcanic action. The stratified rocks of the globe, when undisturbed, lie in horizontal layers or beds. In such rocks, mineral veins are not to be found, such as gold, silver and copper. But where the strata have been thrown up into a vertical or inclined position, there metallic veins may be expected. Silver and copper are usually found, in their veins, in the form of ores which are soluble in water; but gold, being insoluble, is always found in its pure state as a metal. As time wears away the rocky strata, including gold veins, this metal, remaining undecomposed, is strewed over the surface in the vicinity of its veins, or carried away by the rains, or streams of water, or glaciers, along with the sands, gravel and rocky fragments with which it becomes intermingled. Being of greater specific gravity than the debris of the rocks, the gold, in its transportation, finds its way to the bottom of the loose deposits, and is mostly found resting there upon the undecomposed rocks.

Gold is found, then, in two conditions, viz: included in veins, and strewed over the surface at the base of drifted deposits. But silver and copper, occurring generally in the form of ores, soluble in water, disappear from the surface as the veins are worn down, and are not found in paying quantities, except at depths beneath that at which they remain unaffected by atmospheric agencies.

Now, whenever surface-gold is found in a region where the rocks are disturbed, the Geologist infers that gold veins exist near at hand; but if the rocks are undisturbed, the finding of surface gold is no indication that veins exist in its vicinity. It must have been transported from a distance, along with the drifted deposits at the base of which it is found.

Throughout Ohio, Indiana, Illinois, and Iowa, the rocks are all of the stratified order, and remain nearly horizontal, having never been broken up by volcanic action and the intrusion of metallic veins. The only excep-

tions are in the lead regions of Illinois and Iowa, where disturbances have occurred. According to geological science, no gold-veins can exist in any of these states where the rocks remain horizontal. But gold has been found in all of them. How is this fact to be explained consistently with the principles of Geology? It is thus explained:

In the states named, there is strewed over the surface of the country, in irregular beds of various depths, what is called the *Diluvial* formation. It is composed of boulders of Granitic and Metamorphic rocks, gravels, sands, clays, and portions of the local rocks. No granite, syenite, gneiss or other primary rocks exist, *in place*, in any of these states. The masses of them, strewed over the surface, and forming part of the Diluvium, have, therefore, been transported to their present resting places from a distance. What little gold has been found, is included in this Diluvium, and has been transported along with the boulders. All the varieties of rocks represented in the Diluvium, are to be found to the north-west, in the Lake Superior and Rocky Mountain regions. Their transportation eastward is supposed to have been effected by the agency of icebergs, at a period when the Continent was immersed in the waters of the Ocean, or by a sudden inflowing of the sea over the Continent from the north-west. The particles of gold, in the Diluvium, could only be derived from that source. It is no more strange to see gold in this formation, in Ohio, than to see blocks of granite in it there. As granite must exist, *in place*, in the north-west, so also must gold-veins exist there; but to what extent and in what quantities, none can yet determine.

From all the examinations made, in the states under consideration, no encouragement is afforded to the gold-hunter to dig any longer in the Diluvium. It must be labor lost. This must be apparent when it is considered, that the veins from which the gold already found has been derived, must be located at a distance north-west of at least five or six hundred miles; and he who would find it, in paying quantities, must shift his labors to that distant field of action.

It has been said that the rocks of Ohio, Indiana, Illinois, and Iowa, are nearly horizontal, except at a few points; and that they have not been subjected to volcanic action and the intrusion of metallic veins. This is true, also, of the greater part of Kentucky. A line drawn from Sandusky City to Knoxville, Tennessee, presents the strata of the rocks horizontal as far as Cumberland Mountain. Here they are thrown up into an arch or anti-clinical axis, dipping to the north on the northern side, and to the south on the southern side. Beyond this point the disturbance continues for nearly three hundred miles; and in this distance—starting, say fifty miles south of Knoxville—all the veins of copper and quartz bearing-gold, are found. Nearly every where along this line, after entering the margin of the mineral range, the rocks are highly inclined, and in some places the strata stand in a vertical position. The same condition of the rocks exists in California, where both surface-gold and vein-gold are found.

Could the gold hunters of Ohio, and the other states named, see the vast differences between the geology of a true mineral region and that of the one they have been exploring, the contrast would be so striking as to make them desist at once from their fruitless toils;

and did editors possess a little more knowledge of geology, it would prevent them from often misleading their readers to an injurious extent, by reporting the discovery of valuable mines where that science says none can exist.

Cincinnati, July, 1858.

RAILROAD PROFITS.

An article in the last number of the *Edinburgh Review*, upon the "Railways of Great Britain," presents many facts and comparative statements which are both new and interesting. The general results of railroad communication over modern society in cheapening conveyance, saving time, increasing production and capital, and diffusing knowledge and intelligence, are matters of universal notoriety. But the comparative success of railroads, as business investments, in different countries, is not well understood. It is generally supposed that they have proved less remunerative than is actually the case. The fact is, that, upon the continent of Europe more particularly, they are amongst the most profitable forms of investment, as is shown by the following table:

Great Britain, cost per mile, £35.459; receipts, £28,165,000; expenditure, £10,887,000; net receipts, £17,278,000; per cent., 3.97.

Germany, cost per mile, £14.529; receipts, £4,207,116; expenditure, £4,846,744; net receipts, £4,360,372; per cent., 5.05.

Austria, cost per mile, £21.387; receipts, £1,901,045; expenditure, £1,023,918; net receipts, £877,127; per cent., 6.29.

Prussia, cost per mile, £14.101; receipts, £4,537,602; expenditure, £2,341,005; net receipts, £2,196,597; per cent., 6.22.

France, cost per mile, £25,668; receipts, £8,077,846; expenditure, £3,483,642; net receipts, £4,594,204; per cent., 6.14.

United States, cost per mile, £8,060; receipts, £18,996,394; expenses, £10,148,413; net receipts, £8,847,981; per cent., 5.46.

The enormous expense of the railroads in England will be observed; and it is this more than any other cause which has reduced the percentage of profit to so low a figure. In this table the average cost is given of the roads of both England and Scotland, but between these two countries there is a notable difference in this respect—the cost per mile in England having been £40.288, and in Scotland 27.750. In Ireland it was only £14.808. Benefit has been derived from experience, for the more recently constructed roads have averaged only £12.273 per mile in England, £5.408 in Scotland, and £6.716 in Ireland. The average dividend on the English roads is 3.5 per cent., on the Scotch 2.7 per cent., and on the Irish 4 per cent.—The principal causes of the great cost of the English roads have been the exorbitant prices paid for land damages; and the enormous sums invested in operating upon Parliament, roads have been made unprofitable too, by the tendency of Parliament to concede competing or otherwise unnecessary lines; the imposition of a passenger tax, amounting to about eight per cent. of the net receipts from passengers; heavy parochial assessments amounting to some fourteen per cent. of the net receipts; the infringement on the proper income of railroads by the Post-office in carrying parcels, and the partial and oppressive manner in which the compensation law for damages in cases of accident is administered.

BANKING, AND BANK NOTES.

The following view of Bank Note circulation, and Bank Notes, is taken from the "Economist," a paper which is hostile to all Banks—and its opinion must be taken with caution. The "circulation" was largest in 1857, and is now depressed, but is increasing now and will probably reach \$250,000,000, by 1860.

The operation of the security feature of banking seems to be to diminish the proportion of notes that can be kept in circulation. We may take the highest figures for circulation that has ever been outstanding in the United States:

	Circulation.	Notes, on hand.	Notes, outstanding.
1837.....	\$149,185,890	76,533,527	112,652,363
1839.....	135,170,995	97,372,966	107,798,029
1843.....	58,567,604	13,306,617	45,256,991
1848.....	128,506,091	16,427,716	112,078,375
1854.....	204,689,207	22,659,066	182,029,941
1857.....	214,778,982	23,324,038	186,654,814
1858.....	155,208,344	22,447,435	132,760,908

These figures show the years of the highest circulation, except 1843, which was the lowest point. In all other cases the intermediate points were lower. The highest ever reached was in 1856, and the amount was then \$141,000,000 more than in 1843, but only \$74,000,000 higher than at the date of the revulsion 20 years previous in 1837. It was in 1838 that the security feature was first adopted in New York, and it has since spread into nearly all the Western States. It is more particularly since 1850 that this principle has been disseminated. In that year the banks held \$20,606,754 of stocks, against 115 millions of circulation. In January 1858, they held \$60,305,260 of stocks, against 132 millions of circulation, or nearly one-half. The circulation of the West is now increasing. In Jan. 1858, it was as follows:

	Capital.	Stock.	Circulation.
Ohio.....	\$6,500,770	2,068,778	6,201,286
Michigan.....	851,054	323,466	394,676
Indiana.....	3,585,922	1,416,737	3,363,976
Illinois.....	4,679,325	6,161,017	5,738,930
Wisconsin.....	5,515,000	3,626,468	2,913,071
Nebraska.....	15,000	.....	41,641
Iowa.....	None.	New loan.	.....
Minnesota.....	None.	New loan.	.....

In 1851 there were no banks in Illinois or Wisconsin. In the former State the breakdown in 1837 of the State Bank and the Bank of Illinois had so disgusted the people with bank notes that they refused to have any more. It was not long, however, before opinion changed, and the bankers persuaded them to have banks, in order to "protect themselves" against the "rags" of other States. There are there now 45 banks, which issue over \$5,000,000. Wisconsin commenced to have banks in 1854, and she has now 91, which supply from 3 to 4 millions of circulation. Iowa has lately passed, as we hear, said two laws, one for a State Bank, and one for general banking. The State Bank directors met on the 9th, and settled up organization of eight branches of the State Bank. Notices have been issued to these Branches, which are, within ten days after its reception, to elect a member of the Board of Directors of the State Bank of Iowa. The time for the meeting of the new Board, to be elected by the newly-organized Branches, is fixed for the 27th inst.

The following is a list of the organized Branches settled up:

1. Merchants' Branch at Davenport.
2. Muscatine Branch of the State Bank of Iowa at Muscatine.
3. Iowa City Branch of the State Bank of Iowa at Iowa City.

4. Branch of the State Bank of Iowa at Des Moines.

5. Dubuque Branch of the State Bank of Iowa at Dubuque.

6. Oskaloosa Branch of the State Bank of Iowa at Oskaloosa.

7. Mt. Pleasant Branch of the State Bank of Iowa at Mt. Pleasant.

8. Keokuk Branch of the State Bank of Iowa at Keokuk.

This is something like the Ohio State Bank, and banks will be opened at those points at once, and it is probable that they will issue their bills some time next month. Other applications will be considered and decided upon at the meeting on the 27th.

The Minnesota law authorizes the acceptance of any State 6 per cent. stocks and United States stocks, to be taken for security of notes at 90 per cent. of their value in the New York Market. The market to be kept good. These banks are allowed to lend their notes at 15 per cent. interest. There are some dozen applications in the State Auditor's office, and a number have been privileged, and are about to go into operation. The stocks deposited themselves bear 6 per cent. interest, and with the 15 per cent. allowed for lending, makes 21 per cent. that the banker clears by lending these promises. Thus Missouri 6's are 87 per cent. in New York. If a bond is given the whole amount may be obtained in bills from the Auditor. At that rate the bonds give 7 per cent. interest, and the money may be loaned at 15, which gives 22 per cent. This is a tempting profit to draw capital into the State, but the difficulty is to put the money out on favorable terms.

[From the Louisville Journal.]

SOUTHERN PACIFIC RAILROAD.

The following is an official confirmation of the news published by us a few days since, of a compromise having been effected at Marshall, Texas, between the old and the new company. The annexed notice from President Fowlkes gives the basis of the compromise. The new company purports to be a body of creditors, with claims against the old company, amounting to about \$327,000. The terms agreed upon promise the payment of this sum in three equal instalments, at three, five, and seven months, in cash or negotiable paper. To take proper action on this arrangement, the President calls a general meeting of the stockholders, at this city, on Thursday, the 25th inst. The directors of the company are also called on to meet at the same time and place. Among other important business, the stockholders are to elect a new directory:

OFFICE SOUTHERN PACIFIC R. R. Co., }
Marshall, Texas, Oct. 18, 1858. }

A general meeting of the stockholders of the company will be held at Louisville, Ky., on Thursday, the 25th day of November next. A meeting of the directors of the company will also be held at the same time and place. Business of importance will be transacted by both stockholders and directors.

A compromise has been made with the "new company." It claims to be composed of creditors holding against the old company demands for the sum of about \$327,000. The terms of compromise require the payment of this indebtedness in three equal instalments, at three, five, and seven months, in cash or approved negotiable paper. It is desirable to promptly extinguish this indebtedness, that

we may come into possession of the road and property of the company, and promptly proceed with the construction of the road—the means to construct the next twenty-five miles being in the Treasury of Texas. If the debts be paid off, relieving the company of its pecuniary disabilities, and the ability to proceed with the road being shown, no fears need be entertained of the hostility of Texas, or of the guardians of her prosperity, her public policy, and her good faith and honor—yea, of her liberality in the future as in the past, towards this great enterprise—it being the base line of the vast railroad system of the United States.

The stockholders are called together to elect a new director, and to act upon all and every subject which they may rightfully consider.

JEPHTHA FOWLKES, President.

SOUTHERN PACIFIC RAILROAD.

We have already communicated the gratifying intelligence that a compromise has been effected between the two companies. The results of this action, it is hoped, will be to free the company from debt, to discharge honorably and justly every liability, within a reasonable time, to purify the company, and to place its affairs in a sound and healthy condition, to adopt measures to reduce the stock of the company to a cash valuation, so that the stock debt will correspond with the property and assets of the company, and to place the management of the company in the hands of men of high character, who have had no previous connection with it, and in whom the public have unlimited confidence.

It contemplates also the abrogation of the sale under the deed of trust, the restoration of the property in dispute to the stockholders of the old company, when the preceding conditions are complied with, and the co-operation of all parties in Texas and out of it, and, whether connected or identified with the old or new companies, to set aside the State suit for a forfeiture of charter. The Marshall Republican says every one in Texas is well aware there would be no difficulty in settling the suit of the State aside if the difficulties were settled and the company placed in a proper condition, as there is no warmer friend of the enterprise, than the present Governor. The same paper says, that after a compromise is effected, over a million of dollars' worth of stock can be sold in Texas, and five hundred hands placed upon the work by citizens of the State, for which scarcely a dollar would have to be paid in money. Place it in such a condition, and there is no difficulty in uniting the interests of the Memphis and El Paso Company with that of the Southern Pacific. Both companies, this winter, could go before Congress with every prospect of getting such material aid as would insure the building of the road to the Pacific.

These cheering indications will, we hope, lead to a full attendance in our city on the 25th inst., when a meeting of the stockholders has been called. If any one is detained by other business, let him not fail to send on his proxy, that there may be as large a representation of stock as possible.—*Louisville Journal*, 6th.

The sale of the Lexington and Danville Railroad will take place on the 18th inst. It is proposed that the bondholders shall purchase it, organize a new company with half a million dollars, and complete it to Danville.

There is no new feature in the Exchange Market, and rates remain at par to $\frac{1}{4}$ on all the Eastern Cities. New Orleans $\frac{1}{2}$ to 1 per cent. premium. Gold $\frac{1}{8}$ to $\frac{1}{4}$ prem.

Convention of the Stockholders of the C. W. & Z. R. R. at Circleville.

WESTERN R. R. CONVENTION AT CLEVELAND.

CIRCLEVILLE, O., Nov. 10, '58.

The Stockholders' Convention of the C. W. & Z. R. R. (Cincinnati, Wilmington and Zanesville,) met here this afternoon at 2 o'clock. Col. MANNING was called to the chair. Several hundred persons were present. The session was stormy, the speakers' remarks taking a personal range.

C. BORLAND, President of the Road, stated the condition of the Road, and that the object of the Convention was to consider the bondholders' proposition, which was then read.

Engineer DANIELS presented an estimate of the cost of the Glendale Extension, at \$270,000—two hundred and seventy thousand dollars—contrasting it with Ges's estimate of the same work at nine hundred thousand dollars—(\$930,000.)

In the course of the debate, the Receiver's management was assailed as extravagant; and FIFE, member of the Board, was denounced for defeating contract with CHAS. MORAN, of New York and Erie R. R., to connect with Dayton line, by way of Washington and Xenia. Gest, the Receiver, vindicated himself on the general counts, rebutting charges of extravagance.

CHAS. REEMELIN denounced the Moran contract as a trick, Moran believing the Dayton line to be the Glendale Extension.

A committee of five was appointed to report upon bondholders' proposition after supper.

SECOND DISPATCH—NIGHT SESSION.

The session was stormy. Mutual imputations of dishonesty by the President of the Road, and his friends, and Gest, Reemelin and others.

The Committee report by Colonel Van Tromp, was adopted. It was as follows:

The first resolution instructs the Directors to reject the proposition of the bondholders. The second asserts the importance of the Glendale extension. The third expresses confidence that the necessary money can be raised. The fourth requests bondholders to suspend proceedings for foreclosure of mortgage, twelve months. The fifth instructs the Directors to execute the instructions immediately.

The indications are strong that a resolute effort will be made to construct the Glendale extension. The Convention sits late.

THE CLEVELAND CONVENTION.

CLEVELAND, O., Nov. 10, 1858.

The General Convention of Western Railroad Managers met this afternoon at 2 o'clock, in a hall elegantly fitted up for the purpose by the Cleveland Companies over the Cleveland and Columbus Company's offices. It is the largest meeting of the kind ever held East or West.

Gen. Bliss, President of the Michigan Southern, was made Chairman; John B. Anderson and H. C. Marshall, Secretaries.

DELEGATES.—Sandusky, Dayton & Cincinnati;—O. Follett, John H. Hudson, John M. Osborne, J. W. Patterson.

Cleveland, Painesville & Ashland;—Amasa Stone, Jr., Henry Nottingham, James Mills, J. B. Johnson.

Pittsburg, Ft. Wayne & Chicago;—T. Hashlin Deputy, George W. Cass.

Pellefontaine & Indiana;—John Brough.

Cleveland & Toledo;—J. B. Waring, J. A. Jackson, L. D. Rucker.

Little Miami & Columbus & Xenia;—William Dennison, John Durand, Wm. H. Hubbard.

Indiana Central;—John S. Newman.

Michigan Central;—J. W. Brooks, R. M. Rice, P. A. Hill.

Chicago, Burlington and Quincy;—John Van Nestwick, (Pres.)

Chicago, Alton and St. Louis;—E. B. Brown, A. D. Abbott.

Milwaukee and Mississippi;—Geo. S. Dunlap.

Jeffersonville and Indianapolis;—A. S. Crothers.

Cleveland and Pittsburgh;—James Farmer.

Terra Haute and Richmond;—E. J. Peck.

Michigan Southern;—Geo. Bliss, John D. Campbell, J. N. Thingham, D. P. Phelps.

Racine & Mississippi;—Robert Harris, Superintendent.

Ohio & Mississippi;—S. L. M. Barlow, W. H. Clement, P. W. Strader, T. Longh.

Illinois Central;—T. B. McClelland, James C. Clark.

Toledo & Walash;—Warren Colburn, Chas. Knox.

Terra Haute, Alton & St. Louis;—James A. Raynor.

Dayton & Michigan;—R. M. Shoemaker.

Springfield, Mt. Vernon & Pittsburgh;—J. R. Straughman.

Indianapolis & Cincinnati;—H. C. Lord, J. F. Check.

Marietta & Cincinnati;—Beman Gates.

Columbus, Piqua & Indianapolis;—B. Walkup.

Madison & Indianapolis;—R. C. Meldrum.

Pittsburgh, Columbus & Cincinnati;—Thos. L. Jewett.

Ira Hutchinson, L. Devenny, W. B. Hubbard.

Cincinnati, Hamilton & Dayton;—S. S. L'Hommedieu, Geo. Carlisle, J. B. Anderson.

Cleveland & Columbus;—L. M. Hubby, E. S. Flint, H. C. Marshall, Addison Hills.

Buffalo & Lake Shore;—Thomas Starke.

Greenville & Miami;—H. C. Stinson.

Central Ohio;—H. J. Jewett, D. S. Gray.

The representatives of the Atlantic Lines united to participate, but not to vote.

The following is the Representation of the Atlantic Lines: New York & Erie;—Chas. Moran, —Blanchard.

Pennsylvania Central;—Thomas A. Scott, H. H. Houston W. H. Himes.

Baltimore & Ohio;—E. F. Fuller.

At the opening, and after reading the above list of delegates, a lively discussion as to who should be entitled to vote, ensued.

This brought up Stone and Jewett, who insisted that none but Executive Officers and Directors should have the privilege of voting.

This view of the matter prevailed, two or three roads, for special reasons, excepted.—This is indicative of a policy to confine the proposed organization to Executive Officers and Directors.

Some feeling was manifested among general agents. On motion, all delegates from Eastern roads were invited to attend and participate in deliberations.

The Convention directed a dispatch to C. J. Bridges, Canada, one of the Niagara Falls Committee, to come if possible. He having replied that his absence was unavoidable, on motion of J. W. Brooks it was resolved that each road have a vote, irrespective of length.

A copy of slightly modified form of plan for combination of all roads in organization, originally published in the Commercial, was handed each delegate.

It provides that Eastern Roads shall fix rates going West, and Western Roads on freights eastward—an elaborate plan of organization in districts, with commissioners at four thousand dollars per annum, etc., etc.—if adopted to go into effect January, 1859.

Originators of plan understood to be Dennison and J. W. Brooks. Mr. Brooks, President Michigan Central, made strong address to Convention, explaining and defending plan.

He said that four hundred millions of dollars were represented there, with fifty millions gross, (\$50,000,000) annual receipts. There were too many Roads for the business of the country, and too much money and talent wasted in getting business from each other.

Former Conventions had failed for lack of executive officers, exclusively paid to carry out their agreements. This organization would save from three to ten millions per annum, in the West, and would determine whether some proper fees yielded large or small dividends, and whether others were valueless.

The Roads are running down, and much business going to rivers, canals, and common roads, that but for fluctuations in Railroad policy, would go by rail. He expressed a willingness to accept any modifications.

He made a model business speech. A strong disposition is manifested to combine for a powerful organization. This is a natural reaction from violated compacts. There will be a protest from a strong minority. The Convention adjourned till nine to-morrow. It is likely to last three days.—[Cin. Commercial.

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July 14, 1857.

jr23-1m

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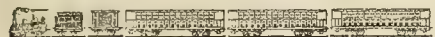
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E. J. PECK,
Supt Terre Haute & Richmond R. R.

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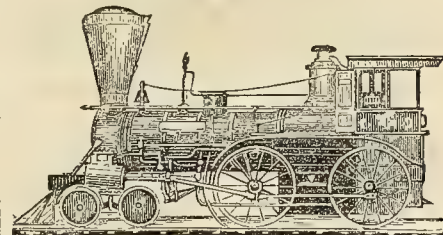
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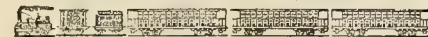
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The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.
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Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

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Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7.30 A. M.—Dayton, Lima and Sandusky Mail Express.

4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that road; at Clyde for Cleveland, Dunkirk and B. & L. Road; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & L. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & L. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6.00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8.05 A. M., 2.30 and 6.0 P. M.

Leave Hamilton at 6.55 A. M., 9.40 A. M., 12.10 P. M. and 4.05 and 8.40 P. M.

For further information and Tickets, apply to the Ticket Offices, northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.
Robert Harris, Sup't.
Racine, May 15, 1857. my21

Union Works, Baltimore.

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Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

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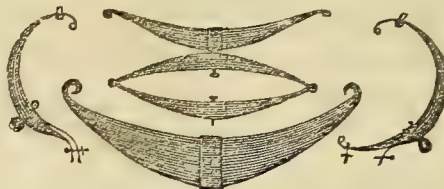
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All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

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May 19.

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EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

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Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—Jy

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,..... NOV. 18, 1858.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING

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THE WELTEEN RAILROAD.—The Logansport (Ind.) *Journal* says that arrangements have been made between the Peoria Company and other parties, that insures the early completion of a connection west between the Wabash Valley and lines running to Burlington, Iowa.

LITTLE ROCK RAILROAD.—We learn from Mr. Robinson, Secretary of the Memphis and Little Rock Railroad Company, that the track laying is progressing rapidly on both ends, and that the road will probably be completed to Madison, on the Saint Francis River, by the middle of November.

COMPLETION OF THE GRADING OF THE FLORIDA RAILROAD.—The grading of the Road, says the *Fernandina News*, was finished on the 20th inst., and the whole route is in readiness for the rails, except the tressel-work at Cedar Keys, which is rapidly progressing to completion. The track-laying will soon be resumed at Cedar Keys, and the point at which the iron has already been laid; and the speedy completion of the road may be confidently anticipated.

RAILROAD CONVENTION—NEW SCHEME—RESULTS.

After numerous conventions, which have resulted in nothing, the recent Convention at Cleveland have done some practical work, provided, always, their work will stay done. If we understand the nature and results of their proceedings, they amount to this:

1. The Railroad Companies have done, what the States ought to have done, appointed a Railroad Commission, to regulate, control, and keep in uniformity the various lines of road. After providing for the election of these Commissioners by the companies West of Buffalo, and East of the Mississippi, the following proviso is made for their duties:

It shall be the duty of the Commissioners to carry into force and effect all orders and resolutions of the Conventions of Roads in interest. To hear and determine upon all complaints addressed to them in writing, as to violations of such rules and regulations. They shall from time to time regulate the rates of fares and freights between competing roads, to and from common points, being guided by a maximum and minimum rate fixed by the Conventions. They shall meet once in each month, at some convenient place in the territory embraced by said roads, adjourning each meeting to the time and place of the next one, and giving notice thereof, alternating such meetings, so that no two successive regular monthly meetings shall be held in the same District. They may hold such special meetings as the nature of complaints, the adjustment of rates, or other business may require.

These are highly important duties, and if carried out, this Commission will save a great deal of trouble, difficulty, and even loss to the Companies. Competition, which is real and natural, will continue to exist; but the competition which arises from temper and opposition, will be done away with. These Commissioners will hold a highly responsible office, and the companies have justly considered, that they should be properly remunerated. They have, therefore, given them four thousand dollars per annum, and their expenses.

The Commissioners are, also, vested with considerable power. They have power to suspend the ticket, and freight arrangements with any other road, on the violation of rules by any one Company; and they may fine the Company upward of a thousand dollars for misconduct.

2. The most important rule of business, binding on the companies, in our opinion, is that in relation to Express Freight Companies, which is thus:

That no Company shall make or continue, after the 1st of January next, any contract with any Express Freight Company allowing any drawbacks or facilities either in the use of cars or despatch of freight which are not allowed to other shippers.

It has long seemed to us, one of the most astonishing things, that Railroad Companies should deliberately give up a part of their own peculiar business to strangers! In plain

words, to allow their own machinery, men, and power, to raise up a competition to themselves! For this is it exactly. These Express Companies have no possible way of making an extra profit, except what the railroad companies themselves furnish; then, why do not the railroad companies take this business, and make this their profit? Can any reasonable being tell? We see, on most of the lines, and we suppose it must be so, a car marked, "A. & Co. Express." Now, this car makes an enormous profit on the carriage of small parcels, and even dry goods on the *passenger trains*. Now, why should not the Railroad Companies have the profit of this car? The Railroad and its officers has all the risk, trouble, and expense of this peculiar facility, and why should it be given up to an Express, any more than to any individual?

Indeed, we think the Railroad Companies should avail themselves of this advantage, to a greater extent than the Express Companies do, for their own advantage. For example, every way passenger, and especially the country traders, want to carry small amounts of freight, in the same train with themselves. Why not allow them this privilege, and make it a means of extra profit to the road? Every important line of Railroad should have an accommodation train each way, not merely for passengers, but with one, two, or three light freight cars attached, which, going at a moderate speed, would make very little difference in expense, and by which the light freight business could be done at an enhanced profit. This might be called the "Parcels Train," and would soon be a source of great profit.

One of the best improvements proposed by the Convention, is the following:

Neither party shall hereafter, directly or indirectly, employ runners or agents of any description, for the purpose of soliciting passengers, or allow any compensation by way of commission, drawback, or otherwise, for procuring passengers for their respective roads; but each party shall be at liberty to employ one person as a traveling agent, to inquire into the sale of tickets by connecting roads, and whether the Company such agent represents is fairly treated by other roads, as to its business at competing points. *Provided*, that during seasons of navigation on the lakes or rivers, any road running its trains into a lake or river port, may employ one person to post its road and connections, and solicit passengers at the port where such road terminates, as against water craft only.

The system of "agents" has been carried to a ridiculous extent, and certainly to their great injury,—especially on the New York Lines, which have perfectly inundated the country with red, yellow, and blue hand-bills.

The rule on passes will amuse some of our city publishers. It is this:

Each Company may issue annual or time passes to the President, or acting President,

Vice President when an active and salaried officer, Superintendent, and Traveling Agent of such Companies as it may have permanent ticket or freight arrangements with; also, two tickets to be issued to the Company, as such, to be used under the control of the President or Superintendent, for business purposes; also, not to exceed two passes to each daily paper, and one to each weekly paper, printed in the counties through which the road may run, which papers regularly publish, free of charge, the time of arrival and departure of trains at the point where such paper is issued; also, to the Commissioners, and all free tickets running after the 1st January next, shall be recalled.

What daily paper do our shrewd Railroad managers think will *advertise* "the time of arrival and departure of trains," for the sake of *two passes* over the road? The price of that advertising is worth ten passes, and we presume this regulation was simply made to give the press notice, that it should be no longer complimented in that way. This is entirely just, but it is hardly wise. Leaving the press entirely out of view (and we are quite sure the daily press will be glad to get rid of such compliments,) why, as a matter of prudence, should a railroad company deny itself the right to issue such passes? Why should not the Governor of a State be complimented with a free pass? Why should not an individual, who stands to the Company, in the condition of one who has done great service, be complimented with a ticket?

The justice of excluding all free passes is perfectly obvious, and we see no right of objection on the part of any one. But, as a matter of policy, it is not wise. They who pay no compliments will probably receive none.

On the whole, the action of the Convention is a good one, and auspicious of a better state of things.

RAILROADS IN OHIO—NEW MOVEMENTS.

At a time when every body, (not of high intelligence,) including many Stockholders and Bondholders, have been busy for a year or two in depreciating the property in railroads, the condition of the great body of Ohio railroads presents a satisfactory and pleasing refutation to many of the charges brought before the public mind. Our readers will bear us witness, that undismayed by commercial overturns, or Wall Street oracles, or popular clamors, we have uniformly claimed that Railroad *property* was much better, and the management deserved more credit (especially in the West,) than the public, in a time of alarm and depression, were willing to believe. The facts will prove the correctness of our views. A little more time is needed—a year or two—to bring all things right. But, in the mean time, our Western Roads are gaining a valuable experience, and daily gaining strength. Let us note some facts in reference to the Ohio Roads:

1. The number of *Casualties* in the past year, on Ohio Roads, is almost incredibly small! In the returns of twelve roads, now lying before us, *not a single passenger* was either killed or seriously wounded! Not more than a dozen employees were injured, and only two or three of those killed. Some half dozen other persons, either intoxicated or deaf, or, in some way *where they ought not to be*, were killed or injured. But, the whole number of casualties was remarkably small. This is high testimony to the *operative* management of the roads; for, were they managed badly, no such results would be found. The accidents and deaths would be ten times as numerous.

2. Generally, the *expenses are diminishing*, and the actual profits increasing; that is, the same amount of business is done at less cost. This is a high commendation; for, like the preceding fact, it shows that the management of the roads is improving financially as well as practically.

3. In the present season, at the close of the year, the *business* of most of the roads has begun to increase, as compared with last year. This, be it remembered, is in the face of very bad crops.

4. The income results of these twelve roads, taken in the aggregate, were as follows:

Total cost.....	\$38,403,983
Net earnings.....	2,167,630
Net profits.....	5.7 per cent.

Two of these roads were as bad, financially, as any in Ohio; three among the best, and the residue medium. On the whole, about an average. Surely, then, a net average of nearly six per cent., is quite as much as the most sanguine could reasonably expect. Three of these roads paid over ten per cent.; one seven; one six; and the residue but little. There is an absolute certainty, that in the coming year, they will pay much more, and, it can not be doubted, that several of these roads, now struggling along, will soon relieve themselves of difficulty.

Some persons will point to comparatively worthless stocks, and roads that pay little or nothing, with poor prospects ahead, and give them in evidence, that railroads are good for nothing!

Now, suppose these gentlemen had, in '55 or '56, or much earlier, in the midst of new enterprises, invested their money in commercial or manufacturing business, would they have fared much better? Let us be candid. Have not a much larger number of commercial firms, and private bankers, in proportion to the whole, failed, than have railroads? A railroad is financially a mere commercial adventure. If it should not always prove profitable, why blame the managers? Why say railroads are overdone? The over-doing of railroads does not depend on any such principle,—its commercial results. It depends on the wants of the coun-

try, for the purpose of carrying off its produce and developing its resources. In this aspect, the Ohio Valley yet needs several new railroads, and, if they are made strictly in conformity with those needs, they will, in the end, be profitable.

To conclude, there are railroads in Ohio and Indiana which now pay but little, and whose stock may be had for almost nothing, which, in a few years, will be good dividend paying roads. But, in the mean time, the original stockholders will have mostly sold out, and new men will come in, making the enterprise profitable. *Time* is an element of all things, and money, even shrewd people forget this; and, might add, *patience* is another element of success. A BETTER DAY for Railroads is fast coming, and let their proprietors wait, in faith.

SOUTHERN PACIFIC RAILROAD.

We call the attention of Stockholders to the fact, that there is to be a meeting at Louisville, Ky., of the Stockholders of this Company, at which Dr. Fowlkes, the President, will submit his report of what he has done in arranging the affairs of the Company. We urge upon all to attend.

The great difficulty with all stock companies is the non-attendance of those who are interested in their affairs at the business meetings. They allow two or three to do all the work, and steal or fool away all their money. It serves them right if they loose the whole. If a man will not attend to his own business, he can not expect others to do it for him with pay in either meal or malt. Hence, let every stockholder be present either in person or by proxy, and let no one hereafter complain of ignorance of the affairs of the Company, or his inability to have a voice in the transaction of its business.

The following remarks we clip from the *Memphis Bulletin*:

We would again urge a general attendance, in person, at the meeting of stockholders called at Louisville, on the 25th of this month. There are a number of considerations which urge it, some of which we propose briefly to suggest.

In the first place, the Compromise which has been effected between the old and the "New Company," is of such a character as to give renewed confidence in the enterprise and to reassure such as may have become distrustful of its management. By it, all the *rights* of the stockholders under the Old Company are fully asserted and recognized—the only obligation come under being that of *paying the bona fide debts* held by members of the new company. There has been no bonus paid, nor is there any to be paid for this settlement upon the basis of a full recognition of the chartered right of the Company, but only the honest agreement to pay its just debts, and thus to free the enterprise from the suspicion and opposition that attached to it because this had not been done. In no degree, nor by any act, have pre-existing legal rights of honest stockholders been put in jeopardy.

The stockholders need have no fear, or hesitation, then, in meeting, liberally and promptly, the calls upon them to meet and liquidate these debts. The time obtained by the Compromise—three, five, and seven months—is ample to enable them to do it with ease; and thus put themselves in the condition to have their Board of Directors go on with the next section of twenty-five miles—upon the completion of which they will be entitled to the State Loan to an amount nearly or quite sufficient to reimburse the outlay.

The hostile legal proceedings of the State authorities having grown out of the contentions between the Old and the "New" Companies will undoubtedly be withdrawn whenever such a satisfactory evidence shall be afforded of the prosecution of the work.—What the State of Texas desires is *the building of the Road*; and she is munificent in her aid to those who will honestly and energetically go on in the accomplishment of that object. The Stockholders of the old company have it in their power, now, to forever secure that co-operation, by simply raising the amount necessary to discharge these debts, receiving the road back disentangled of all legal embarrassments, and going on with it to a glorious completion. The Compromise gives them all that can be asked or desired; and they have but to pay what is due on their stock, in order to realize their most sanguine expectations. Let every stockholder attend the meeting in person, and acquaint himself with the facts, as they now exist.

There is a further reason why every stockholder should be present, in the fact that an entirely new organization will be proposed for future operations. The present President, Dr. Fowlkes, has served the company most faithfully and efficiently; but, we understand, it is his earnest desire to confide the future management of the enterprise, when it shall be entirely freed from entanglement by the payment of these pre-existing debts, to men whose known credit and character will challenge universal confidence, and who will be free to wield its vast resources unembarrassed by the clog of participation in its past difficulties. Let every other stockholder act in the same unselfish and devoted spirit, and the most complete success is beyond the reach of doubt.

We would urge, too, that there be a representation from all the Railroad Companies west of the Mississippi, and those having immediate connections with them, at this Louisville meeting. They are not a whit less interested than the Stockholders: for it is indubitable that this Texas Railroad is the main Trunk Line to the Pacific for all of them. It runs over the shortest and best route. It is the only one which has provision made for its construction a distance of eight hundred miles—half the distance of the great national inter-oceanic road which is to connect the Atlantic and the Pacific. The natural indications point New Orleans and St. Louis to converge upon it. Such being the character of the route, its claims to the aid of the National Government for its extension beyond Texas, can not be overlooked; and the Railroad interests which connect with it ought to be at the Louisville meeting to suggest and aid in making the application to Congress for the patronage of that body.

If such an invitation has not already been extended, we would respectfully suggest it to the President of the Southern Pacific Rail-

road. Lucrative as it may promise to be to the stockholders as an investment, the project swells in importance beyond the limits of a private speculation, into one of national concernment; and whatever may tend to its promotion, ought to be of interest and open to all. In this light, we would invoke the attention and sympathy of the entire Press of the Mississippi Valley in regard to it

SOUTHERN PACIFIC RAILROAD.

MEMPHIS, TENN., Nov. 8, 1858.

T. WRIGHTSON, *Editor R. R. Record*:

DEAR SIR:—All the railroads in the United States are interested in an early connection of the Atlantic and Pacific Oceans by Railroad, and more especially is this the case with the roads terminating on the Mississippi River, from St. Louis to New Orleans, and the railroads in direct connection with these roads upon the East, as well as all cities upon the River and along the lines of these roads. We have reasons to hope that some decided action will be taken by the ensuing Congress of the United States, to further this object.

The Directors and the Stockholders of the Southern Pacific Railroad Company of Texas, as will be seen by the Notice, will assemble at Louisville, Kentucky, on the 25th inst., to unite upon some feasible plan of operations to bring the subject of inter-oceanic communication before the nation; and especially to the attention of the President of the United States and the proper authorities of the nation.

I most respectfully invite you and your company and city to meet our Directors and Stockholders at Louisville, Kentucky, on the 25th inst., to consider the subject and to take such action as shall be held proper and wise. It is believed that all our embarrassments hitherto retarding the progress of our road will be speedily removed; and that our Company will be placed under the control and management of gentlemen of character and experience, commanding for it the confidence of the stockholders and the nation; and will make progress with rapid strides to the Pacific. The connection, with government aid, can be made with the Pacific Ocean by this route in seven years; (with very moderate assistance from the United States Government,) all of which will be made manifest at the Louisville meeting. Attend, if possible.

Very respectfully,

J. FOWLKES, *President*.

NOTICE.

OFFICE SOUTHERN PACIFIC R. R. Co., }
MARSHALL, TEXAS, Oct. 18, 1858. }

A General Meeting of the Stockholders of the Company will be held at Louisville, Kentucky, on Thursday, the 25th day of November inst. A meeting of the Directors of the Company will also be held at the same place.

Business of importance will be transacted by both Stockholders and Directors.

A compromise has been made with the "new Company." It claims to be composed of creditors, holding against the old Company demands for the sum of about \$327,000. The terms of this compromise require the payment of the indebtedness in three equal installments, at three, five and seven months, in cash or approved negotiable paper. It is desirable to promptly extinguish this indebtedness, that we may come into possession of the Road and property of the Company, and promptly proceed with the construction of the Road—the means to construct the next twenty-five miles being in the Treasury of Texas. If the debts be paid off, relieving the Company of its pecuniary disabilities, and the ability to proceed with the road be shown, no fears need be entertained of the hostility of Texas, or of the guardians of her prosperity, her public policy, and her good faith and honor—yea, of her liberality in the future, as in the past, towards this great enterprise—it being the base line of the vast Railroad System of the United States.

The Stockholders are called together to elect a new Directory, and to act upon all and every subject which they may rightfully consider.

JEPHIA FOWLKES, *Pres't*.

PEORIA AND HANNIBAL RAILROAD.

The Peoria and Hannibal Railroad Company was organized under the charter in April, 1854. A preliminary line was run by the undersigned, under the direction of Henry Farnam & Co., who were then engaged building the Peoria and Bureau Valley Railroad, about the time the company was organized. Since its organization, the friends of the road have secured corporate and private subscription sufficient to insure the completion of the road bed, ready for the superstructure, to Rushville, in Schuyler county, a distance of seventy-five miles.

The line was located and put under contract that distance, the past season, since which time the work has steadily progressed, and at the present time will show the following results:

The Peoria and Hannibal Railroad starts at the present terminus of the Peoria and Bureau Valley Railroad, center of Bridge street, in the City of Peoria. It has been contemplated to use either a portion of the Peoria and Oquawka track, or to build a separate track by their side, for a distance of two and a half miles, or to leave the city of Peoria by occupying a portion of Water street, by the side of and parallel to the rights of the Peoria and Oquawka Railroad Company. After leaving the city of Peoria, the line crosses the Kickapoo creek, about half a mile above its junction with the Illinois River,

thence down the river bottoms, and at the base of the right hand bluffs, via. Kingston, to the mouth of Copperas creek, a distance of about twenty-two miles from Peoria. Here it ascends the Illinois bluffs and reaches the table lands or high prairie, in about two miles, thence to Canton, Lewistown, and Vermont, in Fulton county, and thence to Rushville, in Schuyler county, and ultimately to Hannibal, in the State of Missouri, in all a distance of one hundred and thirty miles. From Kickapoo creek to Copperas creek—a distance of about eighteen miles—the line is located at the entrance to extensive and inexhaustible beds of stone coal, which occupy the bluffs this entire distance. These mines are now worked at many points, and conveniently situated to transport coal over this road. The bluffs, also, contain numerous quarries of stone, and the whole country is well supplied with a heavy growth of timber. After reaching the table lands, about twenty-five miles from Peoria, the country is one of the richest and best developed portions of Illinois, producing in great abundance, wheat, corn, pork, and beef, as well as all other productions raised in this climate. After passing over a prairie for about fifteen miles, the line enters a rich body of timbered lands, containing many well cultivated and productive farms, till it reaches Lewistown, the county seat of Fulton County. Here the country becomes broken, the line passing over Spoon River, to the prairies east of Ipavia thence over a beautiful and well cultivated country to Vermont, a distance of about fifteen miles over the last described country. From Vermont, the first three miles continues quite level, and a fine country, when the breaks of Sugar creek occupy about four miles, thence again over a fine level prairie to Rushville, about seven miles. After leaving the bluffs at Copperas creek, the line leaves the Illinois River, and at Canton is ten miles off, keeping that distance or more from the river all the way. The Northern Cross Railroad is from twenty to thirty miles from this line, on the west, leaving a scope of country averaging twenty-five miles wide, or ten miles on the east and fifteen miles on the west, to be drained by this road, with no chance for a competing road hereafter. It is true there are several projects crossing this road, which, if built, will add as much business to it, or more, than they will draw away. There is no portion of Illinois containing all the elements necessary to give a good support to a railroad, as the country occupied by this line. The river is sufficiently far off to prevent carting grain and produce to its ports of uncertain shipments. The country is in a high state of cultivation, and produces such quantities of all the staples of the country, these staples being of such bulk that heavy trains of freight must inevitably pass over this line the year round.

The groves of timber, and beds of coal and stone scattered over the entire length of the road, will add to its shipping, and at the same time render easy facilities for an inexhaustible supply of cheap fuel for all time to come. The effort being for the present to complete the road to Rushville, knowing that nothing can stop its onward course after it reaches that point, when every mile completed will add to the local trade, until it shall reach the Mississippi River, when it will connect with the Hannibal and St. Joseph Railroad, thus opening at once to the Missouri River, and very soon to the base of the Rocky Mountains and Pacific Ocean. It will, as soon as completed, form one of the leading trunk roads from the east and north-east through Missouri to Kansas and the south-west, its way business affording a good supply from the first ten to the last five hundred miles.

The estimated cost of the road from Peoria to Rushville, fitted ready for the superstructure, was as follows:

Through Peoria County.....	20 miles.....	\$70,055
Peoria County to Canton.....	9 ".....	68,045
Canton to Lewistown.....	14 ".....	36,890
Lewistown to Vermont.....	17 ".....	180,120
Vermont to Rushville.....	15 ".....	167,320

Total.....\$522,130
The ties will cost about \$850 per mile.

At the time the road was put under contract, the available means or basis for the payments were as follows:

Peoria County 6 per cent bonds.....	\$75,000
Fulton " 8 " ".....	100,000
Schuyler " 7 " ".....	100,000
Schuyler " 7 " ".....	75,000
Peoria County, private subscription....	38,100
Lewistown, " ".....	75,000
Vermont, " ".....	45,000
Rushville, " ".....	30,000
Total.....	538,100

Total.....\$538,100
At the same time it was estimated that the sum of \$100,000 could be obtained along the line through the progress of the work. There is now subscribed or promised, by the friends of the road, beyond Rushville, and at the city of Hannibal, the sum of \$200,000, not available, however, for that portion now under contract.

There has been expended in Peoria County for engineering, right of way, grading, bridging, etc.....\$88,150
In Fulton County, the sum of.....30,165

Making the sum of.....\$118,315

For which the line has been located seventy-five miles, the right of way nearly secured for about fifty miles; twenty miles of road-bed in Peoria county, can be made ready for the superstructure, for \$10,000, and about eleven miles are complete in Fulton County.

The distance from Chicago to the terminus of the Bureau Valley Railroad in Peoria, is.....	161 miles.
Thence to opposite Pekin, 8.....	169
Pekin to Kingston, 6.....	175
Kingston to Utica, 8.....	183
Utica to Canton, 7.....	190
Canton to Lewistown, 14.....	204
Lewistown to Ipavia, 9.....	213
Ipavia to Vermont, 8.....	221
Vermont to Rushville, 15.....	236

The estimated cost of the road, complete,

from Peoria to Rushville, a distance of seventy-five miles, is as follows:

Graduation, Masonry, Bridging, etc.....	\$322,430
75 miles of main and 3 miles of side track, or 78 miles of superstructure, including ties, iron, chairs, track-laying, etc.....	651,000
Equipments.....	200,000
Buildings.....	87,570
Right of Way.....	30,000
Engineering, etc.....	25,000
Total.....	\$1,500,000

Making a total cost of \$1,500,000, or an average of \$20,000 per mile.

Arrangements can be effected with connecting lines to operate the road at cost, thus dispensing with the equipments and thereby reduce the above estimate \$200,000.

When the system of railroads for Peoria is complete, there will be a road to Springfield and Jacksonville. The Peoria and Hannibal road will hold the key, for eight miles, to both these roads. The road receiving the business and possessing the carrying trade of this road should give at least ten per cent. of the through tariff to Chicago, that being the rate generally paid in this State by trunk roads to their branches. It is extremely difficult to arrive at any definite amount of business, in prospect for any line of railroad in process of construction, particularly when so many projects are in contemplation. This road is so situated that a casual observer must see its business must be immense. The country through which it passes is prolific in all the products of the country. A failure in the crops is of rare occurrence. Coal abounds at intervals all the way, and no contemplated project can affect its business.

The grades are not objectionable for a freight road, descending as they are from the table lands to the valley of the river.

Chicago is destined to handle the entire surplus products of the country, except, perhaps, a portion of the cattle and whisky.

The Illinois Valley is the great natural route to receive and carry off the trade of its vicinity. The easy grades of a road in the valley of the river, renders its capacity a formidable competitor to a route dodging over the breaks of the highlands, where heavy grades and its danger to get out of repair will more than compensate for the erroneous distances too often published to bolster up unnatural routes.

With ordinary crops, the receipts of the Peoria and Hannibal road, when completed to Rushville, may be estimated as follows, for each year:

Receipts at Peoria.....	\$100,000
Tariff on Roads to Pekin.....	25,000
Receipts at Kingston.....	50,000
Utica.....	25,000
Canton.....	150,000
Lewistown.....	75,000
Ipavia.....	75,000
Vermont.....	80,000
Rushville.....	100,000
Ten per cent. on through freights, say.....	50,000
Passenger.....	80,000

Making a total of.....\$810,000

—For a road seventy-five miles long, and estimated to cost one and a half millions of

dollars. At Canton, the ultimate completion of the Mississippi and Wabash Railroad, will render a great support to this road, leading as it does through a rich portion of the Military Tract of Illinois, and reaching the Mississippi River opposite the city of Keokuk, and opening a route which can receive the travel and trade of the southern portion of Iowa and the Des Moines Valley.

RECAPITULATION.

The cost of the Road complete.....	\$1,500,000
Estimated receipts.....	810,000
Dilapidation of road and stock ten per cent. on cost.....	\$150,000
Cost of operating and labor in repairs.....	300,000
	450,000
Leaving, to pay interest on bonds and dividends on stock.....	\$360,000

The population of the State of Illinois in 1840 was 476,183; in 1850, 851,470; and in 1855, 1,299,316.

The assessed value of property in the State, in 1855, was \$333,250,240; in 1857, \$407,477,367; and at the present time it may be estimated at over \$500,000,000.

The State of Illinois is comparatively but slightly cultivated, it contains scarcely any waste lands, is capable of producing beyond the belief of persons not acquainted with its soil, all its products are calculated to freight roads with heavy trains.

Railroads are cheaply built and easily repaired; judiciously constructed and honorably managed, almost any road in the State should pay. This road, located, as it is, in the best developed and richest portion of the State, connected, as it is, with leading roads of the west, and being yet out of debt, therefore, offers a good chance for better investment than any other projected line in the State.

W. G. WHEATON.

MISSISSIPPI & MISSOURI RAILROAD.

Our readers will bear in mind that ever since the decision of the people of the county in favor of taking \$300,000 stock in the M. & M. Railroad, that we have advocated the policy of commencing the work at this end of the route. We are now happy to announce, that notwithstanding the oft repeated assertions of those that pretend to know what the policy of the Company was, to the effect that work *would not* be commenced at this end of the route, and notwithstanding the doubtful position occupied by our neighbor of the *Nonpareil* until he found the project to be a popular one, that the work is actually let, and work *will* be commenced at this end of the route.

On the 17th inst., Messrs. Farnham, Durant, Dey and Price, arrived in our city. Some of our citizens called a meeting to be held on the 19th inst., at Concert Hall, for the purpose of obtaining a public declaration from those gentlemen as to their intentions and determinations relative to the commencement of the work here. At early candle lighting the Hall was crowded full of people from the city and country, anxious to hear from the "Railroad King's" (Mr. Farnham's) own mouth what he intended to do towards the construction of the road.

J. D. Test was called to the chair and the Hon. Frank Street was elected Secretary,

and a Committee was appointed to wait upon the Railroad gentlemen and solicit them to address the meeting. Upon the return of the Committee, Mr. Farnham being announced, was loudly called for, whereupon he took the stand and in speech containing thirty-nine words he said all that the company *did* say, notwithstanding a great many more words were spoken by others. The summing up of the whole matter on the part of the company was contained in Mr. Farnham's speech, as follows:

"Gentlemen: I intend to commence work upon the Mississippi and Missouri Railroad at this end of the route within thirty days, and to push the work forward as fast as money can be raised upon your bonds to do it."

These thirty-nine words contains the "Alpha and Omega," of the companies pledges to our citizens. We are anxious that the company should *bind* themselves to complete the road to the east line of the county; and that the bonds should be issued upon condition that the work should be *completed* and the rolling stock placed thereon, and in order to test the sense of the meeting we introduced the following resolution, which our neighbor of the *Nonpareil* falsely states in his issue of the 23d inst., "reflected severely upon the management of the road." Here is the Preamble and Resolution:

PREAMBLE AND RESOLUTION.

Whereas: The citizens of Pottawattamie county have voted to take \$300,000 stock in the Mississippi and Missouri Railroad. That said vote was given upon the express condition that said road should be completed from Iowa City to the east line of this county within three years from the date of the vote, and that the county bonds were not to be called for until the road was completed as aforesaid. That said company have made no progress whatever since that time in the construction of the road; but now propose to commence at Council Bluffs and work eastward, and, therefore, ask that the bonds of the county be issued. And, *Whereas:* the citizens of this county are disposed to act in good faith towards said company; and require a corresponding good faith on their part: Therefore,

Be it Resolved: That if the Mississippi and Missouri Railroad Company will commence grading the road at Council Bluffs with the *bona fide* intention of completing the same to the east line of the county; and will give good and sufficient security for the faithful expenditure upon said road *within* said county of the proceeds of the bonds and the *completion* of the road to the east line of the county within two years from this date, then in that case we advise the County Judge to issue \$100,000 in county bonds to said Company; and when the sum of \$300,000 shall have been expended *within* the county, that he issue \$100,000 in bonds; and when the further sum of \$200,000 shall have been expended as aforesaid, that he issue the remaining \$100,000 of the bonds voted to aid in the construction of said road.

After we had stated the object of the resolution, Mr. Turley was called out, who with his usual ingenuity, (?) told the very appropriate story (?) about the boy who did not wish to be born again, lest he should be a "gal" next time; and took his seat followed by the thundering applause which is sure to be given, when a man publicly makes an ass of himself.

Mr. Street was opposed to requiring any security from the company; but was in favor of having a time fixed for completing forty miles of the road, and of requiring the company to spend upon the work as much money of their own, as they expended of the counties money, or for every \$100,000 in bonds issued to them, they should spend \$200,000 upon the work, and was in favor of so amending the resolution.

J. T. Baldwin, while the question was pending upon the adoption of the resolution, moved the appointment of a committee to draft resolutions expressive of the sense of the meeting. This motion being out of order, while the question of the adoption of the resolution was pending; we moved to lay *our own* resolution upon the table, which mo-

tion prevailed. The motion of Mr. Baldwin was then put and carried, and the Chairman appointed Messrs. J. T. Baldwin, L. W. Babbitt, H. Everett, S. E. Wicks, and S. N. Porterfield, said Committee, and our resolution was taken from the table and referred to the committee.

While we were absent upon the committee, we understand several speeches were made, in some which the people were given to understand, that if the company were required to give security for the faithful expenditure of the proceeds of the bonds, that no work would be let. When we returned to the Hall, we found the following resolutions introduced by Mr. C. Baldwin, before the meeting:

Resolved: That we have unlimited confidence in the ability and integrity of Messrs. Farnham and others, in the management of the Missouri and Mississippi Railroad.

Resolved: That if the said Railroad Company will commence the work on said Road, within this County, in thirty days from this time, we request our County Judge to issue the bonds of this County in pursuance of the terms of the proclamation heretofore voted upon, and that the said Bonds be placed in the hands of L. W. Babbitt, Thomas Officer, and Caleb Baldwin, to be given up by them to said Company, as the work on said Road progresses in this county.

We will not in this place make any remark relative to the overweening desire on the part of some to forestall the action of the meeting, by introducing resolutions and pressing action upon them while the committee were absent; but would say that in any other place than Council Bluffs, such a course would be regarded, to use the mildest terms, as decidedly discourteous towards the committee.

The committee reported in favor of striking out all after the Preamble, in the Preamble and Resolution introduced by us; and to insert the following resolutions, which the Editor of the *Nonpareil* falsely says, "were substantially the same as those reported by Mr. Babbitt." Read this resolution and see whether it is substantially the same as ours:

Resolved: That if the Mississippi and Missouri Railroad Company will commence grading the road at Council Bluffs with the *bona fide* intention of completing and equipping said road to the east line of the county, and will issue stock to the county, equal in amount to the bonds issued, bearing ten per cent. interest per annum, payable in stock as security for the faithful expenditure of the proceeds of the Bonds, then we advise the County Judge to issue \$100,000 in bonds, and when the sum of \$300,000 shall have been expended *within* the county upon the road, then that he issue \$100,000, and when the further sum of \$200,000 shall have been expended as aforesaid, that he issue the remaining \$100,000 of the loan voted to aid in the construction of said road. And for the protection and assurance of the Company, we pledge ourselves individually that no change or alteration shall be made in said vote. *Provided:* The Company push the work forward without any unreasonable delay, and shall complete and equip said road to the east line of the county within thirty months from this time.

Resolved: That for the further security and assurance of the Company, we consent that the whole amount of \$300,000 in bonds be signed by the County Judge and placed in the hands of L. W. Babbitt and Thomas Officer, in trust, to be delivered to said Company in accordance with the provisions of the first resolution.

After the reading of the resolution reported by the committee, Judge James moved to lay them upon the table, and to take up the resolution offered by Mr. C. Baldwin, which motion prevailed; and Mr. Baldwin's resolution was taken up and adopted. We will remark that we were opposed to the adoption of Mr. Baldwin's resolution; because it requires nothing from the Company. It places \$100,000 of the bonds in the hands of the Company, and \$200,000 in the hands of Trustees, to be given up to the Company as the work progresses in the county, without requiring the Company to do any work, or complete any portion of the road within any given time. Time was the consideration for which the loan was voted—the speedy con-

struction of the road was what our citizens had in view when they voted for the loan; but a portion of them have now publicly resolved to waive the consideration, and trust the Company to do what is right in the matter.

Now, we have no doubt but the Company intend to go on with the grading and probably will finish the road forty miles east, within a short time; but we would like to have them *bind* themselves to do so. As the matter now stands, the Company may take their own time to build the road, having made the bonds safe by the commencement of the work; they can wait until they finish the road from the east before they do any thing more.

While we say that we have confidence that the Company will build forty miles of the road within the next two years; we are free to say that we do not like to rely upon confidence alone—we do not like to see our county tied up upon the mere outside promise of one of the Company—it is a loose way of doing business—a way which no prudent man or community would adopt. Because we ask the Company to *bind* themselves to complete the work within thirty months to the east line of our county, we were denounced by both *knaves* and *fools*, as an enemy to the road and the prosperity of Council Bluffs. To the former we will say, that the people of Pottawattamie county have already placed their mark of disapprobation upon them; and to the latter—we promise our best efforts to secure for them a comfortable residence upon the \$5,000 poor farm.—*Weekly Bugle*.

GREAT AUSTRIAN RAILWAY CONCESSION.

We have received the following account of the great concession of Austrian railways to an Anglo-French Company, from a source on which our readers may place the fullest reliance. It is, beyond comparison, the greatest and grandest thing of the kind in its totality and details which has ever fallen to the lot of any one Company to carry out, and has been confided to capitalists fully equal to the undertaking, great as it is.

The principal conditions of this important affair are now understood to be agreed upon between Baron Bruck on one side, and Messrs. Rothschild, Talybot, Blount, Laing, and Uzielli, on the other, so that the treaty will, in all probability, be signed in a few days.* The State cedes—

1. The line from Vienna to Trieste, 610 kilometres, constructed at a cost of about 140 millions of florins, and now earning a traffic at the rate of ten millions of florins a year.

2. The lines of the Tyrol, Verona, to Botzen, and Kufstein to Innsbruck, together 220 kilometres, which are just completed, and will be ready to open next month, have cost about 30 millions of florins.

2. The works in progress by the State, on the line from Steinbruck, on the Trieste railway, to Agram and Sissek. The payment for these lines is to be a sum equivalent, allowing for interest, to 58 millions of florins, by seven or eight annual payments, of sums of from ten millions to six millions of florins each year.

Four further annual payments of five millions each, equally without interest, are to be made after 1870, if the whole capital engaged in the concession shall then be earning more than 7 per cent., which would be equivalent

to a dividend of 9 or 10 per cent. on the share capital.

The State guarantees a *minimum* return of 5 2-10th per cent. on the whole of this capital; but this guarantee is applied in separate groups, so that the high dividends which will be earned on the Trieste line may run no risk of being diluted by a lower rate of earning on the other lines, which will be made exclusively by obligations.

The Lombardo-Venetian Company is to be fused with the new affair, and the Lombardo-Venetian Shareholders are to receive, *pro rata*, 104,000 of the new shares, making one in three of the old Lombard shares.

The share capital of the new affair will probably be 200,000,000 frs., in 400,000 shares of 500 francs each, with 150 francs paid up, which share capital will be considered as belonging exclusively to the Trieste line, express powers being given to raise all the capital for the other lines of the concession by obligations guaranteed by the State. These lines consist of—

1. The completion of the Tyrol line by a railway of 160 kilometres across the Brenner pass, giving a direct railway communication over the great chain of Alps between Germany and Italy. This line has been carefully surveyed by M. Talabot, and ascertained to present no great engineering difficulties or excessive expense.

2. The line of Croatia from Steinbruck, on the Trieste line, to Agram, Sissek, and Carlstadt.

3. The portion of the line of Corinthia, from Marburg, on the Trieste line, to Klagenfurt and Villach.

These lines together comprise about 550 kilometres, and require a capital of about 150,000,000 francs, to be raised by obligations over a period of ten years, which is given for their completion.

It is also proposed that the present Francis-Joseph Company shall be dissolved, and its two principal lines, viz., from Pesth to Marburg on the Trieste line, and from Oedenburg to Kanisa, made over to the new Company, to whose Trieste line they will form valuable adjuncts.

In this case the present Francis-Joseph shares, upon which 45,000,000 francs have been paid, will be paid off in obligations of the new Company, and the remaining capital to complete these lines, estimated at 80,000,000 to 90,000,000 francs, will be created in obligations, with separate guarantee of 5 2-10ths per cent. from the State for this group.

The ensemble of the affair when completed and fused with the Lombard, will, therefore, comprise a share capital of about 700,000 shares, or 350,000,000 francs, representing the main trunk line from Vienna to Trieste, Venice, Milan, Bologna, and Florence, and a capital of about the same amount in obligations, representing the lines of the Tyrol, of Hungary, Croatia, Carinthia, and Central Italy, and the branches of the Lombard line.

A period of ten years is given for raising this capital, which will be distributed over all the money markets of Europe.

Such are the principal points of a concession, which, if concluded, will certainly be one of the finest affairs in Europe.

Being based on the actually existing traffic of the Trieste line, which is already very large, and will certainly be vastly increased in a few years by the development of the port of Trieste, and by the opening of the

new lines which will connect it with Hungary and Italy, as well as with all parts of Germany, the affair does not partake of the uncertainty of a new enterprise. It starts with an assured dividend as high as the most successful lines have attained to after years of working, and prove the admirable situation of Trieste as the sole shipping port of the Austrian Empire and of all Germany towards the Mediterranean, there can be no doubt that an immense development awaits its traffic.—*Herapath's Journal*.

THE CLEVELAND CONVENTION.

We give, below, the plan of organization, and rules and regulations, as adopted by the Cleveland Convention of Railroads:

PLAN OF ORGANIZATION.

1. The Roads West of Buffalo, Suspension Bridge, north of Ohio and east of Mississippi rivers, shall elect three Commissioners, in the manner hereinafter provided; each of said Commissioners to have his office established at the time of his appointment, or immediately thereafter, in the District by which he is nominated.

2. For the nomination and election of such Commissioners, the territory shall be divided into three Districts, as follows:

First District.—The territory bound west by the western line of the State of Ohio; south by the Ohio river; north by the line of the Northern Indiana Railroad and Lake Erie; and east by the western terminus of the four Eastern Lines. So much of the Northern Indiana Road as lies within the State of Ohio, not to be included within the District.

Second District.—Commencing at the southeast corner of the State of Indiana; thence north by the eastern boundary of said State to its intersection with the Michigan Southern and Northern Railroad; thence with the line of said Road, to its intersection with the western boundary of the State of Indiana; thence with said boundary to its intersection with the Toledo, Wabash and Western Railroad; thence with the Great Western Railroad, to Naples and Quincy; thence with the Mississippi river to Cairo; and thence with the Ohio river to the beginning. The Great Western Road, of Illinois, to be included in the second District.

Third District.—All the territory north of the first and second Districts, east of the Mississippi river, and west of line due north from Buffalo; the whole of the Michigan Southern and Northern Indiana Railroad; the whole of Joliet and Northern Indiana Railroad, and the whole of the Michigan Central Railroad to be included in this District.

3. Each District shall nominate one Commissioner at the annual election, and also in case of vacancy. It shall require a majority of not less than two-thirds of the votes cast in any such District, for the nomination of such Commissioner. Such nomination shall thereupon be reported to the General Convention; and if no objection be made, the same shall be confirmed. If objection be made, the same shall be considered, and referred to the other two Districts, and if such nomination is approved by two-thirds of the votes present of each of such Districts, the same shall stand confirmed; but if such objection be sustained by more than one-third of the votes of either of said Districts, such nomination shall be set aside, and the District proceed to nominate another Commissioner.

4. In all such nominations and action thereon, in District meeting, each incorporated Company shall be entitled to one vote for each mile of its line or lines of road owned and actually operated by said Corporation, within the District. When a road lies in two or more Districts, the Company shall be entitled to vote in each District on the number of miles of its road in such District. *Provided*, That when one and the same Company controls and operates more than one line between common termini, they shall be entitled to vote on the longest line only.

5. Each Company shall vote in person and be represented in District and General Convention, by the President, Vice-President, Superintendent, or a Director authorized by the president in writing, or delegated by the Board duly certified by the Secretary. No proxy votes shall be cast.

OF THE COMMISSIONERS.

6. Neither of the Commissioners shall, during the term of his appointment, be connected as an officer, agent, Director, or stockholder of any Railroad Company.

7. It shall be the duty of the Commissioners to carry into force and effect all orders and resolutions of the Conventions of Roads in interest. To hear and determine upon all complaints addressed to them in writing, as to violations of such rules and regulations. They shall, from time to time, regulate the rates of fares and freights between competing Roads, to and from common points, being guided by a maximum and minimum rate fixed by the Conventions. They shall meet once in each month, at some convenient place in the territory embraced by said Roads, adjourning each meeting to the time and place of the next one, and giving notice thereof, alternating such meetings, so that no two successive regular monthly meetings shall be held in the same District. They may hold such special meetings as the

* The concession was signed on Thursday.

nature of complaints, the adjustment of rates, or other business may require.

8. They shall have free access to such books and papers of each Company, as may be necessary to any examination they may be required to make in the discharge of their duties; and may examine any and all officers, agents and servants of Roads, touching all matters connected with the rules and regulations aforesaid, and the observance or violation thereof.

9. It shall be the duty of any Company within the jurisdiction, upon the requisition of the commissioners, to suspend ticket and freight arrangements with any other Road, that may be found guilty of violating any of the rules and regulations of the Convention, and that may, by said Commissioners, be deemed to merit such a suspension.

10. The Commissioners may, in their discretion, assess a fine of not less than one hundred dollars, nor more than one thousand dollars, upon any company, in place of suspension, for violation of any such rules and regulations; which fine shall be appropriated to the fund for the support of the Board.

11. The Commissioners, or a majority of them, shall attend the Conventions of Roads, and make to each a report of their transactions, and furnish such information as may, from time to time, be required. They shall also make an annual report of the Statistics of Railroads, in a condensed form. They shall keep a journal of their proceedings, and present the same to each convention.

12. A majority of said Commissioners shall be a quorum in the transaction of business; and any orders within the scope of their powers touching any matters in any District in which either of said concurring Commissioners may have been nominated, shall be carried into effect, except an order of fine or suspension, which shall require the concurrence of the whole Board.

13. Said Commissioners shall each be paid the sum of four thousand dollars per annum, and his actual expenses, not exceeding two dollars per diem, while absent from home, in the discharge of his official duties. *Provided*, That in case this compact shall at any time be set aside by the parties thereto, no Commissioner shall be entitled to claim or receive more than six months' compensation thereafter, if his then unexpired term shall exceed that period of time.

14. Any vacancy in said Board shall be filled at the next meeting of the Roads thereafter, in the manner hereinbefore provided; and such election shall be for the unexpired term of the party whose death, resignation, or other cause, may have created such vacancy. *Provided*, That if such vacancy shall occur more than sixty days prior to a regular meeting of the Convention, the remaining Commissioners shall, on the request of not less than 800 miles of Road in the District where such vacancy exists, call a meeting of the Roads in such District, at some central point therein, on ten days' notice, to elect a Commissioner to serve until the next meeting of the Convention.

15. In all Conventions, the rule of voting shall be by miles of Road actually owned or operated by each Company as provided by Section 4; and all questions shall be put to such vote, whenever required by the representative of any one Road.

OF THE CONVENTIONS.

16. Such Conventions of the Railroads in interest shall be held at such places as may be designated on the first Wednesday in March and October. The meeting in March, 1859, shall be held at the city of Indianapolis. The Board of Commissioners shall be elected at the first meeting of the Convention after this compact is ratified; and shall hold their appointment until the Convention in March, 1860, at which time another election shall be held; and such elections shall be held annually thereafter.

17. At each Convention in March and October, an assessment shall be made on the gross passenger and freight receipts from through business only, as ascertained by the Commissioners of each Road, for the six months ending on the first of the next preceding July and January, to meet expenses and salaries of the Board of Commissioners, which assessment shall be subject to the check of the Treasurer, and be disbursed by him on the voucher of the Auditing Committee of the respective Districts.

18. The Treasurer of the Little Miami and Columbus and Xenia Railroad Companies shall be the Treasurer of the Association, until the Convention in October, 1859, at which time, and annually thereafter, a Treasurer shall be elected by the Convention. The Treasurer shall serve without compensation.

19. At the Convention ratifying this compact, and annually thereafter, in October, an Auditing Committee shall be appointed, consisting of one person in each District. Each Commissioner shall file, quarterly, with the member of the Committee in his District, in duplicate, a statement of the items and amount of his expenses, and a bill for his quarter's salary; and upon the approval of said bills, by the District Committee, the Treasurer shall pay the same. Said Auditing Committee shall preserve one copy of said statement, and report the same to the next Convention.

20. From any suspension or fine made or assessed by the Commissioners, an appeal may be made, by any Company feeling itself aggrieved, to the next Convention of Roads; at which meeting such appeal shall be heard and determined. But such appeal, or notice thereof, shall not set aside such suspension, pending the action of the Convention, without the assent of the Commissioners, which assent may be given as soon as the Road returns to observe the rules.

21. The Commissioners shall give notice of each of the semi-annual Conventions, in their respective Districts, at least fifteen days before the time fixed therefor.

22. Ticket or freight connections shall not be maintained by other Roads, with any Road refusing to conform to the provisions of this compact.

RULES AND REGULATIONS.

1. Neither party shall hereafter, directly or indirectly, employ runners or agents of any description, for the purpose of soliciting passengers, or allow any compensation, by way of commission, drawback or otherwise, for procuring passengers for their respective Roads; but each party shall be at liberty to employ one person as a traveling agent, to inquire into the sale of tickets by connecting Roads, and whether the Company such agent represents is fairly treated by other Roads, as to its business at competing points. *Provided*, That during seasons of navigation on the lakes or rivers, any Road running its trains into a lake or river port, may employ one person to post its Road and connections, and solicit passengers at the port where such road terminates, as against water craft only.

2. The parties hereto will not employ freight agents at the West, except at lake and river ports, nor at any other points not on their respective Roads proper, except at Boston, New York, Philadelphia, and Baltimore. No agents for soliciting freights shall be employed by either Company, directly or indirectly, at any points other than those above mentioned. No contract for freight Eastward bound shall be made for more than ten days, and rates shall only be advanced on ten days' notice to Roads interested at competing points. Freights in transit, or shipped the day before the expiration of notice, shall be taken through as contracted. *Provided* the four Eastern Lines shall discontinue their offices and agents in the Eastern Cities, this Organization will do the same.

3. All barrel freight, except flour, shall be carried only by actual weight.

4. The Organizations of Eastern and Western Lines, may from time to time agree upon rates between all common points east and west. They may also jointly agree upon a minimum rate, and as between the rates established and the minimum rate, the Eastern Lines may, by agreement between themselves, scale the rates on westward bound freights, at any time when necessary to meet competition; and the Organization of the Western Roads may, in like manner, scale the rates on eastern bound freights; but in no case shall such reduction be made below the minimum, without the consent of both parties.

5. The division of rates, for the transportation of freights between competing points, shall be upon the principle of pro-rata per mile, reckoned upon the shortest line; but the rate given to any Road, shall not be more than its local rate. No Company shall be required to *pro rata* fares or freights, where but a part of its line of Road is used, nor to meet water competition, without its assent first being obtained.

6. Where one line is composed of all rail, and another of part rail and part water, the rates of transportation over each may be so fixed as to be equal, as near as practicable, taking into consideration time and insurance; and the Commissioners shall be instructed to confer upon this subject with the Organization of Eastern Lines, and report fully thereon to the next Convention.

7. The differences between all rail, and water and rail rates to cover the water communication by Lake and River, as well as by Atlantic Ocean; but whenever the local rates by rail, joined to water rates, shall reduce the through rates to any point, the competing Roads shall have the right to reduce their through rates to such point, so as to leave only the differences, to be established between the water and rail, and the all rail rates.

8. No advertisement or bill of either Company shall, in any way, depreciate the line, route or accommodations of the others, but all bills or advertisements shall be confined to a statement of facts with regard to its own road, without allusion to, or comparison with, other lines of roads, the times of departure and arrival of trains, of the connections with other routes of travel, and the rates and conditions of fares and freights, and all bills issued by Express Freight Companies, shall come within this resolution, and the Railroad Company over whose line their freight is shipped, shall be responsible for their acts.

9. The rates and charges on freight to and from competing points shall be the same on all lines, observing the discrimination between all-rail and rail-and-water routes, and no Company shall make or continue, after the first of January next, any contract with any Express Freight Company, allowing any drawback or facilities, either in the use of cars or despatch of freight which are not allowed to other shippers.

10. No contract or agreement shall be made by Railroad Companies, to deliver freights other than at their depots at points of destination free of charge, nor to deliver to owners at their doors, in any town or city, nor to include any such delivery in the rate of freight, nor to pay the drayage thereon, except by mutual agreement of competing parties in interest; nor shall any special contracts be made, granting any facilities that are not common to all classes of shippers and the depot in any town or city shall be considered the common point, and any Company may pay the actual difference of cartage to such common point. But the rate of freight shall be the same by either line to the shipper.

11. In case of any doubt, of any agent of either of the Companies as to the classification of any articles of freight, he shall, if there be agents of other competing Companies, or either of them at such places, consult such agent or agents in regard thereto; and if they do not agree, the question shall be referred by them without delay to the proper officers of their roads, and by them, if they disagree, to the Commissioners.

12. The rates of transportation upon all live stock to and from all competing points shall be uniform.

13. The following rules in regard to free passes shall be strictly observed:

1. Each Company may issue annual or time passes to the President, or acting President, Vice President, when an active and salaried officer, Superintendent, and Traveling Agent of such Companies as it may have permanent ticket or freight arrangements with; also, two tickets to be issued to the Company, as such, to be used under the control of the President or Superintendent, for business purposes; also, not to exceed two passes to each daily paper, and one to each weekly paper, printed in the counties through which the road may run, which papers regularly publish, free of charge, the time of arrival and departure of trains at the point where such paper is issued; also, to the Commissioners, and all free tickets running after 1st January next, shall be recalled.

2. Passes may be issued to owners and drivers accompanying their stock, not exceeding in number one for two cars, two for over two and under six cars, three for over five and under ten cars, and four for ten cars or over, and return passes for the same parties; such passes to be dated, and endorsed good for thirty days.

3. No passes, other than above provided, shall be issued; except under the recorded orders of the Board of Directors of each road, for purposes purely local to such road; but no passes shall be issued, the effect of which will be to influence travel or freights as against any competing road or roads.

4. All time passes shall be numbered, and a record shall be kept of all passes, except those issued to drivers and employees, showing the number, the name and character of the person to whom issued, and the date thereof, which record shall be open to the inspection of the Commissioners at all times.

5. No road shall pass any person or persons over its line upon the pass ticket of any other road; or the letter or request of any other road; nor shall any such letters be given.

15. No Company shall carry United States soldiers at less than first class fares, except in competition with water and no emigrant or second class passengers shall be carried in first class cars. No first and second class or emigrant tickets shall be sold so as to carry passengers over one portion of a line by first class ticket, and the remaining portion of a second class or emigrant ticket. Eighty pounds of baggage per passenger shall be allowed, and no charge shall be made for excess, unless the whole weight is over one hundred pounds, in which case the whole excess over eighty pounds shall be charged for, at not less, per hundred pounds, than ten per cent. on first class fare, and all passengers over four and under twelve years of age shall be carried at half fare.

16. Should any subordinate officer or agent of any Road, without the knowledge of the executive officers of said Road, knowingly or willfully violate any of the provisions of this compact, such officer or agent shall, upon the fact being established by the Commissioners, be forthwith dismissed from the employment of said Company.

17. The Commissioners shall have no control over nor any authority to interfere with the strictly local business of any road, except to require that no road shall make a local rate less than its proportion of a working through rate.

18. No meetings or conventions shall be held for the purpose of fixing or regulating rates, except under the special orders of the General Convention.

19. In the event of any question arising as to the true meaning of any part of this agreement, the same, subject to existing contracts, shall be construed liberally, so as to meet the real intention of the parties as hereinbefore expressed, and to place all on a fair and equal footing in their competition for the passenger and freight traffic over their respective lines; and should any point of difference not herein provided for arise, the same shall be settled with reference to the general principles hereby established, and on the basis of equal and exact justice to all parties.

20. Should any difficulty arise in carrying this agreement into effect, the parties hereto, in view of the importance of the objects sought to be obtained, agree in good faith to endeavor, by mutual arrangement and concessions, to secure the practical workings of the principles hereby recognized. The working of the plan of organization must depend very much upon mutual forbearance, yet firmness in its execution, and integrity in adhering to its requirements. Those we pledge to each other.

21. The organization may be dissolved at any time upon the vote of a majority in interest. No road shall be permitted to accept a part and discard another part of the rules and regulations, or plan of organization. Said rules and system of organization shall be subject to revision, modification or amendment, at any regular Convention, but only with the assent of two-thirds of the parties interested.

22. This Compact shall go into effect at such time as shall be designated by the first Convention called after the adoption of this Compact.

It is stated that the county of Athens, Ohio, which has been in default on its railroad bonds since July last, has resumed payment.

MUSIC OF LABOR.

The banging of the hammer, the whirling of the plane,
The crashing of the busy saw, the creaking of the crane;
The ringing of the anvil, the grating of the drill,
The clattering of the turning-lathe, the whirling of the mill;
The buzzing of the spindle, the rattling of the loom,
The puffing of the engine, the fan's continual boom;
The clipping of the tailor's shears, the driving of the awl;
These sounds of honest Industry, I love—I love them all.

The clicking of the magic type, the earnest talk of men,
The toiling of the giant press, the scratching of the pen;
The tapping of the yard-stick, the tinkling of the scales,
The whistling of the needle—when no bright cheek it pales;
The humming of the cooking stove, the surging of the bloom,
The pattering feet of childhood, the housewife's busy hum;
The buzzing of the scholars, the teacher's kindly call—
The sounds of active Industry, I love—I love them all.

I love the plowman's whistle, the reaper's cheerful song,
The drover's oft-repeated shout, spurring his stock along;
The bustle of the market-man, as he hies him to the town,
The halloo from the tree-top, as the ripened fruit comes down;
The busy sound of threshers as they clean the ripened grain,
The husker's joke and catch of glee, 'neath the moon-light on the plain;
The kind voice of the drayman, the shepherd's gentle call—
These sounds of honest Industry, I love—I love them all.

Oh, there's a good in labor, if we labor but aright,
That gives vigor to the daytime, a sweeter sleep at night;
A good that bringeth pleasure, even to the toiling hours;
For duty cheers the spirit, as dew revives the flowers.
Then say not that *Jehovah* gave labor as a doom,
No! 'tis the richest mercy from the cradle to the tomb.
Then let us still be doing whate'er we find to do,
With cheerful, hopeful spirit, and free hand, strong and true.

WHICH CAR IS THE SAFEST?

The frequent speculations in the newspapers whether the forward, the hinder, or the middle cars of the trains are the safest in case of accident, cause a great deal of uneasiness, among the over-sensitive traveling public. One person will not enter a forward car, because, if the locomotive should explode, the danger would be greater than in the last car. Another will not go in the last car from fear that it will be run into by a following train; or that it will be thrown off the track by the lateral motion of the train when going at high speeds; and then again the middle cars may be crushed, etc., etc. Now, it is a lamentable fact, that no position in the train will insure you from accidents, any more than walking on the left or right hand side of a street will prevent you from being run over by a runaway horse; or save you from having your hat crushed by a falling brick. For the comfort of those railroad travelers who are so sensitive upon this point of safety, we can state that it has been computed by accomplished staticians from the actual results of the past few years, that the chances of a passenger being maimed or killed by an accident on the railroad is only one to several million against it; and as a further comforting reflection, they may rest assured that under the more systematic and careful management—the result of greater experience—of our railroads, the chances for being killed are growing less and less daily. There is no sense in *dying daily* from fear of being harmed. When you enter a train, take the seat that is most pleasant to you, and keep it while the train is in motion. Keep your head and arms in the car; do not thrust either out of the window to gratify some momentary curiosity; conduct yourself in the car as you would in a respectable gentleman's parlor; break through no rules or regulations made by the company for the

passenger's safety and protection, and you may be pretty certain that the "chances" of your being killed or maimed by a railroad accident are very much in your favor—say, one million to one. Railroad travel is growing safer from day to day. Experience shows the weak elements of the past, and points with great certainty to the safe improvements. We are improving the road bed, the superstructure, the machinery, the signals and every thing else that conduces to greater safety. The mental activity of nearly the whole civilized world is exercised upon the problem of perfecting rapid locomotion—and perfecting its safety is one of the principal aims. Some persons very foolishly keep a list of railroad accidents for the purpose of governing themselves in their choice of cars. Thus they see that at one accident in Maine the forward car was smashed. Consequently they take any other car than the first. The next accident may be at the other end of the country, and the last car of the train is smashed, run off the track or broke loose from the train; then the last car is unsafe. And so they shift round with every new account they may receive. Ludicrous as this may appear to some, it is painful enough to the unfortunate individual who thus dies a thousand deaths from the mere fear of being harmed. We can only say to those to whom this at all applies: burn up your list of accidents, take your seat in the cars with a becoming faith in the goodness of Providence, and dismiss all the idle fears which your own continued existence in the flesh is a sufficient refutation of.—*Am. Railway Times.*

ERIE RAILROAD.

It will be seen by the annexed circular that the Erie Railroad Company has abandoned all attempts to meet the maturing Second Mortgage Bonds of that Road, which fall due on the 1st of March, 1859. Notwithstanding the eminent financial talent engaged in the service of that corporation, the schemes to meet its liabilities have resulted in simply offering the Bonds of 1833 at par in exchange for the Bonds of 1859, which is not likely to be availed of by the bondholders of 1859, as such an exchange would dilute their Second Mortgage Securities too much. That is, instead of holding the road subject to \$7,000,000 of mortgage debt, it would be held subject to \$13,000,000. The circular is as follows:

OFFICE N. Y. & ERIE R. R. Co.,
NEW YORK, Nov. 10, 1858.

In the present position of the finances of this Company, it is evident that it will be impossible to make any negotiation which would enable this Company to reimburse the \$4,000,000 Second Mortgage Bonds, which mature on the 1st March, 1859. Under these circumstances the Company begs leave to inform the holders of these Bonds, that they can either exchange them at par for the Mortgage Bonds due in 1833, (which become Second Mortgage Bonds after the redemption of the Bonds of 1859), or they can retain their present Bonds with all the rights appertaining to them, and continue to receive the interest on them semi-annually on the 1st of March and 1st of September, on presentation of the Bonds at the office of the Company. To those holders who desire to avoid present-

ing the Bonds to collect the interest, new sheets of coupons for five years will be issued on presentation of the Bonds at the office of the Company in this city. To the Bondholders residing in Europe, new sheets of coupons will be delivered at either London, Paris, Frankfort-on-the-Main, Berlin, or Geneva, for which purpose the numbers of the Bonds held and the place at which the sheets of coupons are desired to be delivered should be forwarded to the Treasurer of this Company in this city.

As the property of the Company covered by the Second Mortgage Bonds has cost and is undoubtedly worth five or six times the entire issue of First and Second Mortgage Bonds, (together only \$7,000,000,) the security offered by these bonds is equal to that of any other investment that can be found. It can, therefore, entail no sacrifice to the holders to retain them for a few years, until the Company can realize the funds necessary to redeem them, which will be done as soon as circumstances will permit.

CHARLES MORAN, President.

Gov. Brown, of Georgia, in his message, states that he is decidedly of opinion that it would be good policy for the State to lend her credit to aid in the construction of such roads as may be necessary to develop her vast resources, provided she be made perfectly secure beyond doubt against ultimate loss. He states that the Western and Atlantic Railroad is going on prosperously, and it is believed in future that all necessary repairs can be made, all current expenses promptly paid, every department of the road kept in first-rate order, and that an average of \$25,000 a month can be paid into the State Treasury from year to year. The Governor is so confident of the accuracy of this estimate, that he expresses his willingness to enter into a contract for ten years, to lease the road, paying the sum named into the Treasury, and to return the road at the end of the time in as good condition as he had received it. Of the \$300,000 per annum to be received from the road, the Governor recommends the annual appropriation of \$200,000 toward paying off the debt of the State. This now amounts to \$2,630,500, redeemable at different times during the next twenty years, and by legislation already completed, this is subject to an increase to \$900,000 by issue of bonds to the Atlantic and Gulf Railroad. As the present bonds are paid off by the annual installments of \$200,000, the Governor recommends a new issue of 6 per cent. bonds, to the same amount to be set apart as a common school fund for the use of the State.

The Directors of the old State Bank of Indiana, at a recent meeting, held at Indianapolis, discover that there are about \$200,000 of the Bank still in circulation. They are very anxious to get it all in, if possible, before January 1, prox., and have advertised to that effect, as the charter expires at that time. The State of Indiana will realize, as her share of the profits of the institution, about \$2,500,000.

The Detroit Free Press says that the bouts of the Michigan Southern and Central Lines are undergoing repairs, with the view of resuming trips between that city and Buffalo the coming season.

SOUTHERN PACIFIC RAILROAD.

A meeting of the stockholders in this city was held last evening at Bacon's Hall. Mr. Westcott presented a voluminous report, setting forth at some length the financial condition of the road, the reliability of which was questioned by Col. Bradley. Mr. Westcott admitted that he had not been able to obtain the books of the Company to make up the report from, but claimed that the approximations made by it, could be relied on as correct.

After a general discussion, the motion to accept it was negatived.

Messrs. J. M. Conwell, M. J. Cregler, and John Tait was appointed a Committee to represent the Stockholders at the Louisville Meeting on the 25th inst., and the committee was empowered, "if the compromise proposed at the Louisville meeting was fair, just and equitable," to vote for it and advocate its adoption. The meeting adjourned to meet at the same place on Monday evening next, to take such measures as will secure to Cincinnati a member of the Directory, and to designate a preference.

Matters of interest connected with the management, etc., of the road were freely discussed, and an almost unanimous feeling in favor of its completion prevailed.

CHARLESTON AND SAVANNAH RAILROAD.—We have been very much gratified by the information that, on the 10th of November next, this road will be opened to passengers to Edisto river, thirty miles from the city. At that time it is expected that Blount and Simpson's stages will be placed upon the line, to run as far as Grahamville, which it is hoped may be extended to Savannah. All necessary information will be given in the future advertisements of the company.—*Char. Mercury.*

The following note was addressed to the editors of *The Bulletin*, Philadelphia:

PHILADELPHIA, Nov. 11, 1858.

GENTLEMEN:—We have a dispatch from Pittsburg, informing us that the Supreme Court has decided the case of the Bondholders against Allegheny County, and has granted a peremptory mandamus, commanding the Commissioners to levy the tax and pay the interest on the Bonds. The Judges stood four in favor of and one against the application of the Bondholders.

Yours, etc., J. B. & H. B. FRY.

The sub-contracts for grading the unfinished portions of the Pennsylvania section of the Atlantic and Great Western Road were let last week to parties that are thought responsible. A contract for the cross-ties of this portion of the line was also made at the rate of seventeen cents a piece for white oak ties, facing ten inches.

The citizens of Hart County, Ky., intend commemorating the opening of the Louisville and Nashville Railroad to Mumfordsville, by a grand barbecue, on Tuesday next, the 23d inst.

The Chicago Journal furnishes the following particulars relative to the sale of the Fox River Valley Railroad, mentioned last week:

"The first mortgage bonds amount to \$400,000, and the second to \$180,000. By an agreement between the first and second bondholders the road was sold for the benefit of both, on the condition that the second mortgage bondholders are to receive one-third of the amount of bonds in stock on payment of 10¢ cent in cash upon that one-third, receiving stock also for 10¢ cent advanced. The first bondholders to pay 5¢ cent in cash and receive stock for the whole amount of bonds and the 5¢ cent. The creditors of the road to the amount of some \$38,000, also to come in upon same terms of the second bondholders, viz: $\frac{1}{2}$ of their claims in stock on payment of 11¢ cent in cash. The money thus collected is to be used for the redemption of rolling stock sold for taxes and payment of laborers and secured debts. Making the capital stock about \$500,000. The road is 33 miles from Elgin to the State line at Richmond, where it connects with the Wisconsin Central R. R. The valuation under the new arrangement will be about \$15,000 per mile of road.

GEORGIA RAILROAD FRAUDS.

A Committee was appointed by the last Georgia Legislature to investigate the affairs of the Western and Atlantic Railroad, in which that State owns the principal interest. That Committee have just reported to the present session of the Legislature. They have discovered fraud and speculation to a very large amount. The Savannah Republican gives the subjoined extract from the report, saying that it is but a sample, and promises to continue the subject:

THE DEFALCATIONS ON ROAD.

The following is a list of the defalcations returned to us, and the result of our examinations with regard to them:

No. 1 W. N. Bishop, former ag't Chat'ga.....	\$2,313 90
" 2 W. T. Wilson, " Atlanta.....	8,223 21
" 3 J. W. Kirkham, " Etowha.....	1,694 16
" 4 J. W. B. Summers, " Kingston.....	745 24
" 5 J. Pyron, " Dalton.....	4,222 42
" 6 H. T. Moseley, " Resaca.....	292 29
" 7 W. A. McTravey, " Cartersville.....	2,242 01
" 8 S. W. Lawson, " Calhoun.....	893 22
" 9 J. Robertson, " Tilton.....	50 72
" 10 R. A. Holt, " Dalton.....	4,133 53
" 11 W. Guess, " Tunnel Hill.....	1,134 05
" 12 W. C. Norris, " Tunnel Hill.....	62 66
" 13 J. Vail, " Chicka'ga.....	213 40
" 14 K. W. Hargrove, " Dalton.....	20,120 69
" 15 E. B. Reynolds, " Atlanta.....	894 88
" 16 Note of N. Ousley & Son, insolvent, and in hands of L. N. Whittle, Attorney.....	120 00
" 17 T. J. Summers, former agent, Adairsville.....	92 70

Making a total due and unpaid, of.....\$53,448 24

Thanks to J. H. Klippart, Esq., for a copy of the Agricultural Report of Ohio, for 1857, Second Series. It is valuable as a book of reference.

The total receipts of the New York Central Company for the fiscal year, ending Nov 1st, were six million, seven hundred and four thousand dollars. It is believed that this will leave eight per cent. to the stock after providing for the operating expenses, renewal of roadway and repair of embankment, and all other charges incident to the gear. The gross traffic is cut down \$1,323,138 from the previous year, by reason of the temporary revulsion in the general business of the country. In that year \$525,536, or about 2½ per cent. net surplus over the eight per cent., was added to the income account.

The Illinois Central Railroad Company have closed a contract for the erection of a good, substantial depot at Cairo city, the southern terminus of their line. The building will be of stone and iron, two hundred and fifty feet long and thirty wide; one end to be two stories high, to be situated on the river side of the main track. The improvement is made with the view of preparing for an increased southern business, which is likely to accrue from the completion of the Mississippi Central Road.

MONETARY AND COMMERCIAL.

Since our last the offerings of good business paper have been large, but all has been freely taken at 10 to 12 per cent.

An increasing ease in the Money Market, is an unusual state of things for this season of the year, and is evidence of a brisk trade during the coming season.

The buying rates for Exchange on the East have depreciated somewhat, but the selling price is still ¼ per cent.

New Orleans is dull at 1 per cent., with a downward tendency. Gold could not be sold in any large amounts at over par.

An advance of 25 to 50 cents per 100 has taken place in the price of hogs. Considerable sales have been made at \$6 50 to \$6 75, the latter for extra heavy lots.

The number of hogs in Ohio, as returned to the Assessors up to April 1st, is.....2,554,914
Compared with.....2,331,778
last year.

SALES AT THE NEW YORK STOCK BOARD.—NOV. 15.

\$3,000 U. S. 5's '74.....	114 ½
\$1,000 Tenn. State 6's '68.....	90
5,000 Virginia 6's.....	96 ½
9,000 Miss. 6's.....	89 ½
10,000 Cal. State 7's, new bonds.....	91 ½
2,000 Erie R. R. Bonds, '75.....	88
2,000 Hudson River 3d Mt.....	71 ½
6,000 Ill. Cent. R. R. B.....	93
13,000 La C. & Mil. L. Gt. B.....	27
1,000 Chicago, St. Paul & Fond du Lac L. G. B. L.....	14
7,000 Gal. and Chic. 1st Mt.....	92
200 Shares New York Central.....	62 ½
450 " Erie R. R.....	16
100 " Hud. River R.....	33
25 " Pacific Mail St. Co.....	104 ½
600 " Reading.....	50 ½
50 " Mich. Cent.....	52 ½
100 " Milwaukee & Miss.....	13
250 " Mich. S. & N. Ind.....	22 ½
150 " Mich. S. & N. Ind. pref.....	51
100 " Panama.....	119 ½
100 " Illinois Cent. R. R.....	80
100 " Galena & Chicago.....	73 ½
650 " Cleveland & Toledo.....	32
100 " Chicago & Rock Island.....	63
250 " LaCrosse & Milwaukee.....	4 ½
400 " Reading Railroad.....	48 ½
600 " Harlem R. R.....	2 ½
40 " Clev. and Pittsburgh.....	7

Rock Island Railroad, is even less favorable than the previous week:

The earnings were.....	\$19,000
Same week, 1857.....	35,400
Decrease.....	\$16,400

The earnings of the Toledo and Western Railway, for the first week of November, were \$16,406, which is rather larger than for the same period of last November.

The winter rates on freight westward, by the different railway lines, took effect in Boston and New York on Monday last, and in Philadelphia on Tuesday. The rates from Philadelphia to different points in the West are as follows:

To Columbus, Ohio.....	\$1 20	\$1 00	82	62
To Cincinnati, Ohio.....	1 30	1 10	10	67
To Louisville, Ky.....	1 50	1 27	1 05	80
To Indianapolis, Ind.....	1 25	1 15	95	70
To St. Louis, Mo.....	1 80	1 60	130	95
To Chicago, Ill.....	1 60	1 25	110	80

RAILROAD EARNINGS.

The earnings of the Pittsburgh, Fort Wayne and Chicago Railroad, during the month of October, were as follows, viz:

From Freight	\$77,553 43
From Passengers	75,660 44
From Mail	4,482 29
From Rent of Road	5,560 00
From Miscellaneous	207 50

Total.....\$163,513 66
Earnings during same month last year, 1857.....160,900 71

Increase.....\$2,612 95

The expenses in October were as follows, viz:

Station Expenses	\$8,621 65
Cost of Running	24,790 46
Repairs of Machinery	16,579 53
Maintenance of Way	30,789 32
General Expenses	11,111 73

Total.....\$91,892 69
Expenses in same month last year.....84,531 07

Increase.....\$7,361 62

Net Earnings in October, 1858.....\$71,620 97
Net Earnings in October, 1857.....76,369 64

Decrease.....\$4,748 67

The above increase in the expenses is the result of large expenditures made during the past month, on account of the renewal of iron and cross-ties.

The business of the first week in November, on the

The following is a statement of the earnings of the New York Central Railroad for the month of September, 1858, compared with its earnings for the corresponding month of the previous year:

1857.....	\$799,783 85
1858.....	602,937 71

Decrease.....\$197,346 16

In the aggregate earnings for the month of September, being the last month of the fiscal year, are included the arrearages of miscellaneous items for the year, not previously reported, because not definitely ascertained. The miscellaneous earnings referred to were:

For Sept., 1857.....	\$62,773 10
For Sept., 1858.....	47,825 34

Decrease.....\$14,947 76

The receipts of the Terre Haute and Alton Road for—

October, 1858, were.....	\$84,062
October, 1857.....	82,993

Increase.....\$11,069
September, 1857.....79,453

These earnings are the largest the road has made since Oct., 1856, and have been nearly all from local business. The aggregate of the year thus far shows the following result:

1858.....	\$631,675
1857.....	692,335

Decrease.....\$60,660

The whole of this decrease took place during June, July and August, when the disastrous floods interrupted seriously the business of the Road.

The Cleveland, Columbus and Cincinnati Railroad October earnings, were as follows:

By Passenger trains.....	\$37,771 76
By Freight trains.....	63,317 58
By Rents.....	6,546 96

Total.....\$108,636 30
Earnings for October, 1857.....100,323 40

Increase.....\$8,312 90

The earnings of the Cleveland and Mahoning Railroad Company for October, were:

Passengers.....	\$4,410 75
Miscellaneous freight.....	9,283 61
Coal.....	12,828 24
Mail.....	262 50

Total.....\$26,785 10
Expenses.....9,916 92

Net earnings.....\$16,868 18

Same month in 1857:

Gross earnings.....	\$18,925 59
Expenses.....	7,107 52

Total.....\$11,808 07

Increase net earnings.....\$5,060 11

The receipts of the Michigan Southern Road the first week in November, for passengers, freights and mails, were as follows:

1857.....	\$49,243 11
1858.....	37,419 39

Decrease.....\$11,823 72

The earnings of the Chicago, Burlington and Quincy Railroad Company, between Chicago and Burlington, in October, 1858, were for

Freight.....	\$37,654 53
Passengers.....	41,948 19
Mails and miscellaneous.....	1,859 00

Total earnings.....\$131,461 72
Length of road, 250 miles.

Earnings of the Quincy and Chicago Railroad Company, between Galesburg and Quincy, in October, 1858, were for

Freight.....	\$15,009 45
Passengers.....	12,675 72
Mails and miscellaneous.....	850 00

Total earnings.....\$28,535 17
Length of Road, 100 miles.

The earnings of the Central Railroad Company of New Jersey for the month of—

October, 1858, were.....	\$71,682 60
For the same month last year.....	41,038 88

Increase (68 per cent).....\$27,593 87

The revenue of the Baltimore and Ohio Road for October, was as follows:

	Main Stem.	N. W. Va.	W. Branch.	Total.
1858.....	\$333,626 81	\$15,765 68	\$43,110 63	\$392,503 62
1857.....	354,502 85	.....	41,629 00	396,131 85
Dec.....	\$20,476 04		Inc.....\$1,421 63	
Decrease.....				\$3,398 83

The annual gross earnings of the Baltimore and Ohio Road, Main Stem, are understood to be some \$3,856,000, a decrease of about \$760,000 on the previous year. The working expenses have averaged 65.63 per cent. of the gross earnings, against 59.70 last year. The revenue from the coal trade was reduced to something over \$800,000, against \$1,570,000 in 1857—about \$120,000 of this decrease is by reason of the fifty cents per ton reduction in the freight on coal since that measure went into operation. The floating debt at the beginning of the year was \$820,998, at the date of the report, \$284,000; which has since, it will be seen by the annexed monthly statement, been further reduced:

STATEMENT of Floating Debt and Available Means.

DEBT.	
Amount of Bills payable.....	\$219,035 39
Balance of interest uncalled for due on Company's bonds.....	9,000 00
Interest due 1st July on bonds of the North-Western Virginia Railroad Company, uncalled for.....	1,260 00
Cash advances.....	3,789 93
Total.....	\$233,085 37

AVAILABLE MEANS.

Uncollected revenue—estimated amount, the books not being posted.....	\$275,000 00
Cash on hand.....	72,665 25
Bills receivable, due within 60 days.....	10,502 22
City stock on hand \$1,008 60, say at 99½.....	908 55

Total.....\$359,166 06
The bills payable on October, 12th, the date of the last statement, amounted to.....\$262,283 33
Same at the present date.....219,035 39

Showing a decrease of.....\$43,247 94

The North-western Road has increased the indebtedness of the Company about \$360,000 during the year. This branch now owes the Company \$1,102,683.

EDWARD J. MANSFIELD, C. E.

Offers his services on Railroads, Turnpikes, or Civil Construction. He has been employed for several years in Ohio, and Tennessee, as assistant Engineer.

Refer to—

E. D. Mansfield, } Cincinnati.
T. Wrightson, }
A. Kennedy, Iowa.
C. Davies, New York.

oct. 7-41.

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

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Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care. We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.
Feb. 16* JOSEPH DAVENPORT.

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AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

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CHAS. W. COPELAND,
Consulting Engineer,
64 Broadway, N. Y.

New

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 258 H Street, Washington, D. C. april 2

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No. 4 In preparation, same subject as No. 3. No. 5) Tricks and Traps of Horse Dealers.

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NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.
July 14, 1857. Jy23-1m

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ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair, Back and Swing Saws, Concave Fellows Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.
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AND BOSTON.

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THREE TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

6 A. M., 10 A. M., and 10:15 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 6 A. M. and 10:15 P. M. trains.

The above Trains arrive in Baltimore at 9:40 A. M., 5:13 P. M., and 5:19 A. M.; in Washington 10:50 A. M., 7 P. M., and 8:30 A. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:20 A. M., 6:45 A. M., 3 P. M., and 5:20 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.



Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.
E. J. PECK,
Supt Terre Haute & Richmond R. R.

PAGES

PATENT PORTABLE CIRCULAR SAW MILLS.

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10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10:15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10:15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

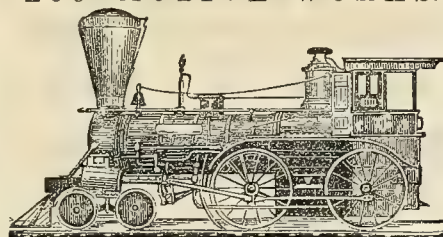
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1858 1858.

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Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

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Monday, May 31, 1858.

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FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7:30 A. M.—Dayton, Lima and Sandusky Mail Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

6:00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7:30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburg and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6:00 P. M. Train for Hamilton.

RETURNING TRAINS

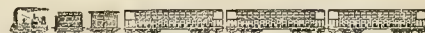
Leave Dayton at 8:05 A. M., 2:30 and 6:00 P. M.

Leave Hamilton at 6:55 A. M., 9:40 A. M., 12:10 P. M. and 4:05 and 8:00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



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A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Sup't
Racine, May 15, 1857. my23

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PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

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THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

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WALTER McQUEEN Sup't. Aul6.1y

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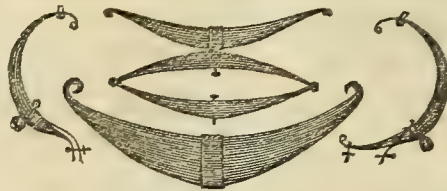
THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have saved neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

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Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

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I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

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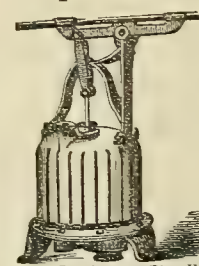
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Railroad Record.

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CINCINNATI:

THURSDAY MORNING, NOV 25, 1858.

Railroad Record

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THE WELTERN RAILROAD.—The Logansport (Ind.) *Journal* says that arrangements have been made between the Peoria Company and other parties, that insures the early completion of a connection west between the Wabash Valley and lines running to Burlington, Iowa.

SOUTHERN PACIFIC RAILROAD.—The stockholders of the Southern Pacific Railroad held an adjourned meeting at Bacon's Building, on Monday evening, and after considerable discussion it was resolved to instruct the Committee representing the stockholders of Cincinnati at the Louisville meeting, to sanction, by their votes, the Texas compromise, and also to use their influence and votes in procuring the election of J. M. Conwell of this city to the new Board of Directors, to be elected at the above meeting. After which they adjourned, to meet again at the same place next Monday evening.

ANNUAL REPORT OF THE BALTIMORE AND OHIO R. R.—COMMERCE OF THE WEST.

We always receive the report of this Company with pleasure; first, because it is the best prepared statistical document in relation to the commerce of Railroads, and next, because it gives us a great deal of valuable information. It is, in reality, a volume of great interest. We shall proceed to consider it *serialim*.

1. OF FINANCE.—The actual results of working the road, in the last current year, was as follows, viz:

Revenue,	\$3,856,485
Working Expenses,	2,531,199
Excess of Revenue over Working Expenses,	\$1,325,286
Working Expenses,	65 63-100th per cent.

The working expenses are undoubtedly large; but part of this is in fact, due to what ought to be called construction.

Cost of the Road is,

In point of fact, therefore, the Road has made but about five per cent. on its cost. Considering the losses on all roads, during the past year or two, this might be considered a satisfactory result.

The "Washington Branch," as it is called, of the Baltimore Road, actually made about fourteen per cent. profit; placing it among the most profitable roads in the world. The explanation of this is, that the Road from Baltimore to Washington is almost the only avenue to Washington.

The Revenue of all sorts, and of all branches of the Baltimore Road, for both the years 1857 and 1858, are exhibited in full by the following table, viz:

MAIN STEM, NORTHWESTERN VA., AND WASHINGTON BRANCHES.

	1857.	Passengers.	Tonnage.	Total.
Main Stem,	\$732,362 49	\$3,884,736 46	\$4,616,998 95	
N. W. Va. R. R.,	16,117 58	58 256 69	74,374 27	
Wash. Branch,	337,430 30	117,029 54	454,459 84	
	\$1,085,810 37	\$4,060,022 69	\$5,145,833 06	

	1858.	Passengers.	Tonnage.	Total.
Main Stem,	\$681,878 10	\$3,174,607 69	\$3,856,485 79	
N. W. Va. R. R.,	41,000 20	206,973 76	248,004 06	
Wash. Branch,	345,367 38	124,055 54	469,422 92	
Totals for 1858,	\$1,068,275 78	\$3,505,636 99	\$4,573,912 77	
1857. 1,085,810 37		4,060,022 69	5,145,833 06	
Decrease,	\$7,534 59	\$54,385 70	\$571,920 29	

An examination of these figures proves that there has been a falling off in the revenue of the Main Stem proper, of \$760,513 16. In 1857, it will be remembered, our accounts exhibited only the returns for the last three months of the year, from the Northwestern Virginia Road, then recently opened. Counting the entire fiscal year just closed, we have a revenue of \$258,004 06 from that Road; which, added to the revenue of the Main Stem proper, reduces the falling off of the two roads to \$586,883 37. There has been an increase of \$14,963 08 on the Washington Branch, which, subtracted from the decrease on the other portions of the road, shows the net falling off in the Company's revenues for the entire Road to have been \$571,920 29.

2. CONDITION OF THE ROAD.—The officers of the Company congratulate themselves, and with reason, with having entirely completed the *arching* of all Tunnels on this Road, in the year past. The Baltimore Road, as the reader is well aware, has a great number of tunnels, and some of these have, in time past, proved dangerous, for the want of arching. These arches are now completed.

Mr. W. P. Smith, Master of Transportation, says:

"To these circumstances, as well as others, is largely due the singular immunity from accident, which is rapidly gaining for the line a high character for safety and comfort. Added to this is the deep satisfaction derived from the actual completion of the great work of arching all of the tunnels on the line, between Baltimore and Wheeling. In view of the unpleasant and costly experience with several of these tunnels, in their incomplete state during the past six years, (since the opening of the Road west of Cumberland,) their safe and permanent arching—now finished—is a fact of extraordinary importance in the history of the road, and well calculated to strengthen the general confidence in its future successful and economical working."

3. COMMERCE.—This is to us an interesting branch of the Statistics of this Road. It exhibits very clearly the immense business derived from the products of the Ohio Valley. The following statement must be regarded as very remarkable. It shows that while the commerce of the whole country has been diminishing, and the United States revenue reduced, and the Northern Railroads reducing in freight, *the business of the Ohio Valley has been increasing*, and the amounts of its produce exported increasing.

MERCHANDISE TRADE.—As already remarked, there has been a large increase in the general through merchandise trade for the past year, and especially from the west. The through tonnage eastward for the year, (including live stock and freight from the terminal stations proper,) has been as follows:

From Wheeling,	31,512 tons.
" Benwood,	68,001 "
" Parkersburg,	70,571 "

Making a total of,

170,084 tons of 2,000 lbs. Which produced a revenue to this Company (including the N. W. Va. Road's proportion) of \$1,248,516 56. It will be seen that it has yielded the Company but \$7 34 per ton of 2,000 lbs., or an equivalent to \$8 22 for the long ton of 2,240 tons. The above enumeration, however, includes all the through live stock loaded at Wheeling and Parkersburg, and which has paid an average of about \$9 per short ton. Under the low rates prevailing during the greater portion of the past year, these figures are much below the previous average yield of the through business, which, according to a special report made

from this office in March last, was found to have been \$9 10 per long ton, prior to the 1st of February, 1853. The difference thus represented is \$133,637 63, which is our estimate of the actual loss to this Company (in the reduction of the average rates previously received) upon eastward bound through freight during the past year, arising from the competition with other roads.

The through tonnage westward (exclusive of iron), to Wheeling, Benwood and Parkersburg for the year, has amounted to 54,779 tons, which is 292 tons more than the previous year, and yielding a revenue of about \$430,000, or some \$40,000 less than for the year previous.

The entire through tonnage east and west for the past year has been 224,863 tons, or 49,852 tons more (exclusive of Pig Iron to Wheeling) than for the year previous.

Here is a positive increase of business from and to the Ohio Valley of 50,000 tons, or 25 per cent. of the whole amount! This increase is made, at the very time, that the aggregate tonnage of this Company has diminished. The nature of this business will be understood, by looking a little into the details. Take the following:

THE FLOUR TRADE.—The statistics of this trade exhibit a marked increase for the past year. The number of barrels brought to Baltimore over the Main Stem and North-western Virginia Road was 986,001. If to this is added the 18,592 barrels brought from the Washington Branch, we have the unexampled aggregate of 1,004,594 barrels of flour brought to Baltimore in the past twelve months by this Road. This would show an increase of 194,080 barrels arriving by the Main Stem over the 791,921 barrels of the previous year, and an increase of 75,405 barrels over the aggregate of 1856, which was the heaviest previous year in this trade.

Baltimore is a large shipper of flour to Europe; but, in addition to this, she distributes a large amount to other eastern cities, as shown in the following table of exports:

New York.....	125,255
Boston.....	65,148
Providence.....	17,705
Philadelphia.....	162,509
	370,617

This kind of trade will increase; but, where did this flour come from? The following shipments from points on the Ohio River show:

From Wheeling.....	66,819 bbls.
" Benswood.....	309,793 "
" Moundsville.....	11,153 "
" Parkersburg.....	294,549 "
Aggregate.....	682,312 "

Thus nearly 700,000 barrels of flour were derived to the Baltimore and Ohio R. R. from the Ohio Valley.

A little further analysis of Western Produce derived from the Ohio may be interesting. The following articles were also carried

from Wheeling, Benswood, and Parkersburg, viz:

Pork and Bacon.....	140,000 bbls.
Lard and Butter.....	9,000,000 lbs
Whisky.....	100,470 bbls.
Tobacco.....	20,252 bbls.

The value of these, including flour, amounts to eight millions one thousand dollars! Thus, from these articles alone (derived, too, almost wholly from the State of Ohio), we have this enormous amount of value carried over this single road!

Two things yet remain to be done for the Baltimore and Ohio Railroad, which will make it the most important route for the transportation of freight in the United States. These are the perfect connection with the Marietta Road, and the Bridge over the Ohio. Less than a million of dollars more will make both these improvements. At present, the Baltimore Road receives not more than one-fourth of the business by the Marietta Road, which it might receive.

When all the connections and improvements originally contemplated are put in execution, the receipts of the Baltimore Road will be nearly double what they are at present.

THE TRANSPORTATION OF DOMESTIC PRODUCTS ON OHIO RAILROADS.

In a former article we proved that, whatever might be said, in the present state of public despondency, in regard to railroads,—yet it is certain that in regard to Ohio roads, they had (as a body) been tolerably profitable. So far from their being, as many persons represent, either bankrupt or worthless, the very contrary is true. Some pay good dividends—others pay moderate ones, and others have devoted their income to paying their floating debt, and thus adding it to their capital. On the whole, they are doing very well. We propose now to show one of the modes by which Ohio roads have been able to do a reasonably good business; when so many other roads are comparatively failing. This is by the immense quantity of domestic produce carried off. Here we may stop to recur again to some part of the past history of railroads. When the iron road was first introduced, it was boldly said, that they could not carry freights at all—they would only do for passengers. In a short time it was concluded that they would carry light freights; but any competition with canals, was deemed impossible, and the very idea absurd! This was the theory about thirty years ago; and the main idea of the Baltimore and Ohio road, was that it would carry passengers and light freight over the Alleghany mountains, but even over the mountains, the canal was thought essential to any heavy commerce. On this theory the Chesapeake and Ohio canal was projected, and it has only been within half a dozen years, that the rivalry between them has been given up. In fact, the great business of the Baltimore and Ohio Road, at the present time, is in heavy freights.

The Ohio roads furnish now a very good illustration of the adaptation of railroads to carry

forward the products of the country, at a profitable rate. Of the paying roads, a large part of the profits is made from the freights of the agricultural produce of this State. In this they possess a vast advantage over the roads in many other States, for Ohio has been, for many years, the first agricultural State of the Union, and sends to market an immense amount of products. We suspect very few people have any idea of the magnitude of that business. We are enabled to give the amount of domestic products carried over nine roads, viz: three into Cleveland, two into Cincinnati, two towards Pittsburgh, one to Sandusky, and one (Central Ohio) towards Baltimore. These by no means show the whole, nor the whole exports of the State (which last comprise river and canal boats, railroads,) but they do show the vast change which has taken place in commerce, by the new improvements, and also that this new kind of transportation is likely to increase still more rapidly. The following is a portion of the domestic produce carried over these nine roads, viz:

Flour.....	1,303,852 barrels
Wheat.....	1,448,005 bushels
Other Grain.....	2,491,135 "
Whisky.....	330,270 barrels
Beef, Pork and Lard.....	362,785 "
Cattle.....	107,577 head
Hogs and Sheep.....	871,848 "
Butter and Cheese.....	15,986,000 pounds
Wool.....	4,118,000 "
Tobacco.....	12,000 hhd

This enormous amount of domestic products carried over nine railroads, only looks as if it might well be the entire exports of the State, but, as we remarked, it is far from it. None of the Toledo exports are included in this,—only a part, by the Baltimore Road, and a part by Cincinnati, while it troubles not at all, the business of the canals. Six years ago, not one tenth of this produce was taken by railroads, and now behold this vast change! We are persuaded in our own minds that the railroads have a far higher destiny before them than has been supposed, in respect to this kind of service. The traffic business on our roads is not yet understood. We alluded in our last number, to what may be called the "Parcels train." Such a train might do a great and valuable business, even in small things. We have spoken above of the effects of carrying general produce on these roads: Suppose they were to go one step further, and make it convenient for gardeners, fruiterers, and small traders to do their business by cars—as most of them now do by waggons, and by omnibusses,—can any one imagine the amount of local business which might be done? This is one way in which the business may be increased. But the great way will be the increase of the products themselves, which will take place with the better harvests, and better crops, which, we have no doubt, is near at hand.

☞ The Directors of the Milwaukee and Mississippi Railroad held a meeting at Milwaukee on Wednesday, to consider the new difficulties under which the Company are now laboring; and the result, we learn by telegraph, was every way satisfactory to the stockholders.

PACIFIC RAILROAD.

The great national question of a railroad to the Pacific, is beginning to attract the attention of the world. There are but few great enterprises connected with the history of our country about which there has been so much said and written, and so little accomplished as this. We have shown a great lack of foresight and ability to concentrate the sentiments and available resources of the nation to this great work, and if we are not as sharp as our world-wide reputation for the possession of that quality, our Canadian cousins, with the overflowing aid of their foster father, will beat us. It is a burlesque on our national character, that for so many years we have been without it. The following article from the *New York Times* takes a sensible view of some of the causes leading to this delay:

Outside of the corruption which so unhappily pervades our political system, there is no one of its evils whose effects are more pernicious to the interests of the country than that of procrastination. It lives in our law courts, revels in our municipal halls, and is most rampant in our legislative chambers. The activity which pervades our social life has no connection whatever with our political existence. Beyond the appropriation bills which involve the division of the public money among hordes of political expectants, no enactment in all the long category of our legislation, is ever carried through with that decent and straightforward readiness which should distinguish a commercial people. Almost every measure before Congress is judged upon strictly party grounds. Its merits are regarded as entirely secondary to its subserviency to the views of the Democrats, the passions of the Republicans, or the prejudices of the Americans; and, no matter how great may be its importance to the country at large, it must be used as a vehicle for oratorical displays on completely foreign subjects.

Such has hitherto been the fate of the Pacific Railway bill. The shuttlecock of political dissensions, the sport of party trickery, and the victim of legislative procrastination, it has been suffered to lie over, under the bombastic eloquence of simulated zeal, which has been even more disgusting than total neglect. We believe, indeed, that there are few of our legislators who give themselves the trouble of thinking of the immense consequence to us and to the world, of the Pacific Railroad. The British, who, to their credit be it said, are rarely dilatory in carrying into execution public works of national importance, have already seriously turned their attention to the building of a railroad from Halifax, across the Canadas and Western British America, to the colony of New Columbia, on the Pacific. This scheme, far more immense in its grasp and extent than our proposed connection with California, is unquestionably replete with objects of vast consequence to England. But the importance of its effects to her, great as they are, dwindle almost into insignificance when compared with the results which must accrue to us from our Pacific Railroad—connecting the cities of what we now call our West with the still further West at California. With great Britain, the Canadian scheme is a question of opening new fields for commerce, and extending political power for purposes of aggression or defence. The United States, in addition to objects which are precisely similar to those of England, have also in view the nursing of new settlements, of which the nuclei already exist, and which only await the stimulus of the Pacific Railroad to expand into important cities, contributing to the power and swelling the resources of the Union. And more, much more, than this; the railway will consolidate

our Empire, will bind California and Oregon and the many cities and other States which such a road will create or develop, in closer and more constant union with all the other sections of the confederation.

In view of such prospects, delay in building the road on the ground of an inability to agree upon its location is puerile and vicious. It is not the selection of the Northern, Southern, or Central route that now is to be quarreled about. It is only the preference of the one route for immediate action, and the postponement of the others for later adoption. No thoughtful man, who will consider either the actual necessities of the undertaking or the prospective benefits which are to spring from it, can satisfy himself with the idea that one road will, after a comparatively few years, meet the demands to which it will itself give rise. There will be so many new and such constant calls from various cities all over the West for railroad communication with the Pacific, and with the places which will have grown up between the Mississippi and California, that there must necessarily be more than one railway route to the Pacific. But the one thing needed to effect all this is the pioneer road, and no petty party feelings must be allowed to stand in the way of its commencement and speedy completion. Public sentiment is becoming aroused on this subject, and public feeling is everywhere hostile to any further procrastination in a matter of such vital importance.

There are already three routes before the public, the entire feasibility of every one of which has already been ascertained. Indeed, one of them, that from St. Louis, and through Memphis to Fort Smith on the Arkansas river, along the northern frontier of Texas, through the territory of Arizona, and across the coast range into California, is now regularly and with perfect safety employed by private enterprise for the transmission of passengers. The practicability of the undertaking, which has been long since proved by the surveys of competent engineers in three different directions, has been further and absolutely demonstrated by the actual use of one of these routes; and the more northern lines are regarded by competent authorities as equally good. The public are therefore naturally anxious that the Government should give its immediate attention to the subject of the Pacific Railroad, and we trust that the President will, in his message to Congress at its next session, take up this matter with the earnestness with which it deserves. With three feasible and advantageous routes to select from, already surveyed, and waiting only for legislative action, it will be very hard if, through our unwarranted procrastination, the British are permitted to forestall us in the execution of a project which affects us much more than it does them. They have not nearly the incentive which should animate us; the railway must benefit the United States much more than it can aid England or her Provinces, and the glory of completing railway communication between the Atlantic and the Pacific should certainly be ours. Such a road must be the future highway of nations, and it is unnecessary to dilate on the pecuniary and political advantages to us which must accrue from having it pass through our territory. At any rate, it is proper that the Executive should lend its immediate influence to the project, and by special and decided mention of it in the next Presidential message to Congress, throw upon that body the responsibility of prompt action or further delay. Special prejudices in favor of particular routes must undoubtedly exist in various localities; but the national feeling evidently is that, no matter what section of the country may be chosen as the route of the Pacific Railway, a selection should at once be made, and the work commenced forthwith.

THE GREAT RUSSIAN RAILWAY.

The first general meeting of the stockholders of this colossal undertaking has been held at St. Petersburg, when the Director General, M. Collignon, laid before the assembly a report, from which we extract the following as the most important particulars:

The plan of operations embraces a system of railway lines to the extent of 4,000 versts (about 2,666 miles.)

1. The line from St. Petersburg to Warsaw.

2. The branch to be opened from this line to the Prussian Frontier, towards Königsberg.

3. The line from Moscow to Theodosia, Kursk, and the region of the Lower Dnieper.

4. A line branching from thence to Kursk or Orel, passing by Dunabourg, and ending at the Port of Libau.

5. The line from Moscow to Nijni Novgorod.

1. The first object of the Directors of so vast an undertaking is, in conjunction with the Prussian government (who have already commenced the requisite works on their territory,) to connect St. Petersburg with Königsberg, and thus with the European system of railways.

2. To bring into active operation, and with the least possible delay, the line from Moscow to Nijni-Novgorod.

3. In order to commence in the present year the works on the southern line, between La Samara and Theodosia, so as to realize the junction of the Dnieper from a point taken below the cataracts, facing Ekaterinoslav, with the Black Sea.

The line from St. Petersburg to Warsaw has been for some years past in process of construction, but its completion has been retarded by political events.

The first 42 versts between the imperial residence of Tsarckoe-Selo and Gatchina have been opened for traffic. From Gatchina to Louga, the main body of the railroad is completed; and beyond this, at various points, earthworks have been commenced in the rough, and, indeed, to a considerable extent advanced, more especially from Louga to Pekow and between Bialistock and Warsaw.

The Government, on its part, has taken important measures for securing the establishment and due working of the railway. The whole of the contracts for earthworks, the conveyance of materials, and for the supply of fuel for the locomotives, for many years to come, have been adjudicated; orders for nearly one-half the quantity of rails required to reach Warsaw with a double line, have been given at the Gural Works and abroad; a contract has been entered into with manufacturers in Berlin and Hamburg for the construction of 2,000 carriages; and two contracts have been finally concluded with the engineering establishment belonging to His Imperial Highness, the Duke of Leuchtenberg, one for the supply of one hundred locomotive engines, and the other for maintaining in working order the whole of the rolling stock on the line up to the year 1866.

Second Section.—Samara to Theodosia. This important line will unite the river navigation of the Dnieper, taken at a point above the Cataracts, with the Black Sea. It will start from Ogren, on the Samara, a little below the embouchure into the Dnieper, and nearly facing Ekaterinoslav; thence follow-

ing the valley of the Dnieper to Alexiowska, passing by Alexandrovsk, and reascending the plateau of the German Colonies, approaches within five versts of Melitopol, crosses the Swack close to the salt works at Genitchi, bears to the eastward of the Crimea, and reaches the Black Sea near Arabat, thus avoiding the heights above Theodosia. This line, from the river Orel to Theodosia, is about 539 versts in length.

The necessary measures are being taken, and the contracts have been settled, for executing the works across the Crimea. The line, bending to the eastward near Theodosia, passes within 16 versts of the small fortress of Ack-Mania, on the Sea of Azof, near Arabat, thus connecting the navigation of the latter sea with the port of Theodosia, and avoiding the dangerous passage through the Straits of Yieni-Kale. The branch in question renders, indeed, Theodosia a seaport both on the Black Sea and the Sea of Azof, and offers an advantageous means of transit for the natural products of that region, the principal of which is the anthracite coal from the banks of the Don, which descend by that river to the Sea of Azof, and will be taken straight to the port of Ack-Manai for transit on the railway and distribution, whether at Theodosia or on other parts of the line. The same Ack-Manai branch line will furnish, moreover, easy and direct access to the only coal field from which to draw the requisite fuel for the consumption of Theodosia proper, and for supplying the steam vessels which are likely to be attracted thither by the establishment of the railway itself. Further, it will afford a much required opening for the produce of the coasting trade of the Sea of Azof (chiefly building materials,) from the regions lying between Ack-Manai and Cape Kjeadie, as likewise for the trading ports of Rostov, Taganrok, Merioupol, and Berdiansk, wherein the entire commerce of the Sea of Azof is at present concentrated, but which are of difficult access for the vessels that frequent the Mediterranean and the Black Sea.

The line from Kursk, or the river Orel, to Libau.—This line will branch off from the Great Southern Line to Kursk, whence it will open on the port of Libau. The preliminary surveys have been made between Dunabourg and the Baltic, and its completion offers not the slightest engineering difficulty. This line, passing by Mitau, would be the basis of future easy communication direct with the ports of Libau and Riga, and, if need were, of a branch line opening in the port of Windau.

The line from Moscow to Novgorod will follow, to a great extent, the present high road passing by the principal cities and towns and in the very center of a populous and productive country, in the direction of Chouia, and of the Iron works of Mouron, which will be connected, through the river Oka, with the railway abutting on that river opposite Corbatov. This line will pass near an important stone quarrying neighborhood. It will for the first eight versts from Moscow, be part of the Great Southern Trunk Line comprised between Moscow and Toula, to which allusion has already been made. Thus there will be but one starting-point in common. The establishment and bringing into working order of the section and station between Gatchina and Louga (86 versts), was the first object of the promoters. As early as the 22d August, 1857, the works were so far completed, as to allow of the emperor

performing a journey thereon; but it was not until the 5th of December following that the regular public traffic to Louga could be opened.

By the opening of the section from Gatchina to Louga, 128 versts of Warsaw line are brought into action, but the line can not as yet be considered complete, various buildings being required for the traffic.

The works between Louga and Pskov are all but finished. This section will likewise consist of 128 versts. Beyond Pskov, to Dunabourg and Warsaw, the works have been in abeyance, since 1857.

Up to the 31st December last, the stock in locomotives was as follows:—10 locomotives for passengers, 8 wheeled, built on "American" system; 6 goods-engines, 6 wheeled, same make; 6 engines, mixed make ("composite") from abroad. This stock will shortly be increased by the addition of 74 engines, mixed make, and 4 special passenger train engines.

According to contract with manufacturers at Berlin and Hamburg, there will be, in 1860, a further addition of 300 passenger carriages, and 1,800 vans for cattle and goods.

On the 31st December, 1857, there were on hand—11 first class carriages, 2 first and second class (composite), 11 second class; 2 second and third class (composite); 50 third class; 68 wagons (baggage and goods); 41 horse boxes; 220 flats, and 120 earth-trucks.

The mixed second class carriages are 8 wheeled, on the so-called "American" system; all the others are 6 wheeled.

In order to facilitate the locking and un-locking of trains, the Directors state that they have reduced to four the number of wheels in nearly all the wagons forming goods-trains.

The line from Moscow to Theodosia will be 1,200 versts in length. Its abutments will be, on the one side the sea, and on the other Moscow.

1st Section.—From Moscow to Toula. The chief engineering difficulties on this line arise on the right bank of the Moskawa, between Moscow and the Oka, and the passage across that river. By the original plans, the line was to have passed near Kaszira; but on account of the enormous expense (estimated at 110,000 silver roubles per verst,) and of certain engineering difficulties, this plan required to be modified, and it is proposed that the line from Moscow to Toula shall follow the valley of the Moskawa, on the left bank of that river, and cross the Oka a little below Kolomna.

At Moscow there will be but one starting station in common, both for the Theodosia and Nijni lines. This, according to the report, is an advantageous arrangement, namely the union of two different railways for the first few miles of their extent. As regards the portion of the line between Moscow and Pskov, the arrangements as far as to Wladimir are all definitely made; the requisite contracts for the construction of the main works of the railway between Moscow and Wladimir having been entered into, with sufficient guarantees, so that it is confidently stated that the entire and, in a commercial point of view, highly important line from Moscow to Nijni will be opened for traffic in the course of 1861.

Up to December, 1857, the actual traffic had been confined to the 42 versts sections between St. Petersburg and Gatchina; subsequently, it had been extended by 80 addi-

tional versts to Louga. The gross receipts up to the 31st December, were 87,440 roubles, 69c., showing but a trifling excess (1,328r. 15c.,) over expenditure, the working of the line in its present incomplete state being considered as scarcely more than experimental, and affording no fair criterion for the future. When the railway shall have reached Pskov, the goods traffic, more especially of that of firewood, is expected to be highly remunerative.

An interesting feature of this great undertaking, is the establishment, in connection with it and St. Petersburg, of a foundry and workshops, on a scale of unprecedented magnitude. The company have arranged for the purchase of the foundry and engineering establishment lately belonging to the heirs of His Imperial Highness, the Duke of Leuchtenberg, for about two millions and a half of roubles. As it is contemplated that the business of this factory, however extensive hitherto, will but barely suffice for the demands of the new railway, the Directors announce that no further orders from other quarters or from abroad will be received. The portions of the Ducal Foundry establishment, heretofore celebrated for the production of works of art in bronze and "melchior" castings, have accordingly been disposed of by the railway directors for 145,000 roubles, which price includes the plant and tools, and the stock of art-castings ready for sale, or in course of construction.

The "Technical Committee" attached to the Director-General is charged with the examination of all new schemes, proposals, inventions, etc., and takes cognizance of all questions of practical import relating to the working details and mechanical operations of the railway. The members must be resident in St. Petersburg. To these are annexed a body of engineers, specially appointed to manage the orders given for working material, etc., in France, England, or Belgium.

The Director-General is Inspector General of roads and bridges in France; the two special Directors belong to the same corps, one as engineer-in-chief, the other as engineer of the first class. The Company's engineering staff consists of 53 officers of the corps of Russian "means and ways of communication," and 11 engineers of the French Imperial corps of bridges and roads (*Ponts et Chaussées*.)

From the importance of the subject, we have considered that the above details may not prove uninteresting at a period when the attention of Europe is directed to one of the most colossal enterprises of the present day; an enterprise the results of which, as developing the hitherto latent resources of Russia, commercial, monetary, and industrial, are likely to prove of the highest moment, not only to the balance of power in Europe, but to the position, political and moral, of the whole world.—*Artisan, London.*

THE RIO GRANDE AND NORTHERN MEXICO.

The Brownsville *Flag* of the 10th inst. gives the following account of the total extermination of a tribe of Indians.

We have just been informed by Mr. Adolf Glaevecke that the small band of Indians which for a number of years have been committing murders and robberies on both banks of the river, have been exterminated to the last warrior.

It will be remembered that about seven

months ago these Indians crossed over from Mexico, and, after killing Mr. Gaspar Glaevecke, stole a number of horses and made their escape back. Recently they had been depredating on the Mexicans and were forced to seek safety on this bank. This information was given to Mr. Adolf. Glaevecke, the brother of the murdered man, who in company with Nepomuceno Cortinas, gathered a party of thirteen men and started in pursuit.

On arriving at the Arroyo Colorado, they learned that the Indians were in the vicinity in force, well armed, and determined to resist.

Seventeen men soon joined them, and on the 30th ult., the Indians were overtaken, and nine warriors, composing the whole of the adult males, killed.

The women and children of the tribe were brought in and distributed among the different ranchos. The Indians were overtaken fifty miles from this place.

This ends the once powerful tribe of Tampacuas, and thus the pursuer revenged himself for the murder of his brother. None of the tribe now remain but a few squaws with their children.

The yellow fever has been very severe among the Mexican population at Rio Grande City. About a hundred have died. Strange to say there have been no deaths among the Americans either in the town or at Ringgold Barracks.

At Roma also they have been greatly afflicted with the sickness. Heavy frosts have occurred on the Upper Rio Grande, which, it is supposed, will put an end to the epidemic.

GALENA AND CHICAGO UNION R. R. CO.

We annex, says the New York *Tribune*, a letter from the President of the Galena Road addressed to one of our evening contemporaries. We give it as a portion of the Railroad history of the times, but must express the opinion that it is in bad taste, to say the least, in Mr. President Turner to endeavor to depreciate the value of the property a month after, according to his own confession, he and his friends had sold out their stock. A suspicious person might possibly entertain the idea that he and his friends were nearly ready to buy in again, and that the letter was a stock jobbing ruse. We annex, also, an official estimate of the business of the Company, made and published some time since, showing that under different circumstances estimates may be made to produce very different results. This latter estimate was as follows:

Surplus.....	\$55,000
August Earnings.....	115,000
September.....	161,000
October.....	190,000
November.....	175,000
December.....	100,000
January.....	100,000
Total.....	\$896,000
Expenses \$65,000 per month.....	\$390,000
Interest.....	130,000
Sinking Fund.....	25,000
	545,000
Balance.....	\$351,000
Dividend, 4 per cent.....	240,000
Surplus.....	\$111,000

The new estimate, it will be seen in the annexed letter, brings the result to a much finer point:

OFFICE GALENA AND CHICAGO UNION
RAILROAD COMPANY,
CHICAGO, NOV. 12, 1858.

To the Editors of the Evening Post:

In your issue of the 5th instant, under the head of "Finance and Trade," there appears

a communication, which you say is "from a reliable source," commenting upon the affairs and policy of the Galena and Chicago Union Railroad Company, and upon my connection with said Company, which, if unnoticed by me, might lead stockholders and the public to erroneous conclusions as to the prospect of this Company, as I understand them, and the propriety of my action in tendering my resignation as President.

I have not, from the time I entered upon the construction of this road in 1848, permitted myself to speculate by the sale or purchase of its stocks at the Stock Board or elsewhere. I have been a holder, permanently, most of the time, of a much larger number of shares, than any other active Director in the Board. I have not owned, directly or indirectly, any lands, town sites or lots on the line of the road, or at either of its termini, which could influence my judgment in the location of the line or any of the depots, nor have I held the office of President for the sake of the salary paid me. I am not now, directly or indirectly, connected with or interested in the operations of any "clique in Chicago" or elsewhere, "whose reported sales on time may not result so favorably as they hoped," or for any other purpose.

Myself and friends have sold a larger portion of our stock in this company for cash since the 6th of December last, at which time the (in my opinion) abstract impracticable policy which has borne upon the Company for the past year has reached its climax.

We sold this stock with no intention of again investing in any security which we believe to be controlled by abstractionists or cliques of mere speculators.

It is true that the great amount of capital in this country, which is invested in railroad stocks and bonds, demanded, in this case, that 10,000 or 15,000 shares of the stock of this Company should be purchased by a clique in New York, within a short time previous to the 5th October last, to defeat a measure which was deemed vital to the future prospects of this Company, and which every Board of Directors had unanimously sanctioned, as the records will show from 1853 to the 6th of October last, for the purpose of admonishing me and other railroad managers that we are hereafter to consider ourselves as the pliant tools of whatever cliques or theorists may be in the ascendancy temporarily; or to warn us of the many errors that have been committed at the East as well as at the West, by extending aid to connecting lines or branch roads; the sacrifice of this hitherto reliable stock, (however mortifying it may be to me,) is not, perhaps, too great for the public good, if the movement effects the desired reformation in railroad managers.

I beg leave to inform your "reliable correspondent," that after over eight years experience as President of this Company, I had no reason to suppose that the stockholders entertained any "fears" that I would "be influenced by persons more designing and less scrupulous than myself," if I was not "associated with a board of directors thoroughly cautious, economical and conservative in their views;" at least, no such "fears" have been manifested by any of the stockholders at any annual election of directors, since the Company was organized. But, after full reflection, and in view of all the circumstances connected with the vote of the 6th of October last, my judgment justifies me in the disposal of a large portion of my interest, and in resigning my position as President of this Company; and

I have not found any reliable friends who understand the practical effects of this newly inaugurated policy, who advise me to remain, unless this policy, which appears so suicidal to us, shall be abandoned in time to remedy the present and prospective evil consequences.

I shall cheerfully retire when a successor shall be found by the Board, who will be, doubtless, "quite as capable" to fill my place, and who may not have as many fears of the effect of the policy adopted by the stockholders as myself.

Your "reliable correspondent" endeavors to account for the extraordinary falling off in earnings wholly by the depression of business at the West and North-West. To this cause a very large portion of the decrease may be truly attributed, but no inconsiderable portion of it is due to the effects of a policy which has heretofore controlled to some extent, and which, when carried to extremes, results in doing nothing beyond our own lines to induce business that will increase our net revenue.

Your "reliable source" has given you figures to show to stockholders, and others who may be induced to purchase stock (a portion of the 15,000 shares, perhaps), that they can rely upon a four per cent. dividend in February next. I will hereto subjoin figures which are reliable to the 1st of November, and estimated to February 1, that he and others may understand, according to my best judgment now, what dividend stockholders may rely upon in February next:

Surplus in cash, after paying the August dividend.....	\$37,000
Earnings in August.....	127,350
" September.....	161,949
" October (nearly correct).....	140,000
First week in November (estimated).....	\$27,200
Balance of the month, pro rata.....	77,700
	104,900
December, estimated.....	100,000
January, estimated.....	80,000
	\$760,199
Expenses in August.....	\$66,683
" September.....	61,260
" October (nearly correct).....	60,100
" November (estimated).....	57,000
" December (estimated).....	55,000
" January (estimated).....	55,000
	354,943
Estimated net earnings to February 1, 1858.....	\$411,256
Interest on 2d mortgage bonds, Nov. 1, 1858.....	\$62,000
Cost of \$35,000 2d mortgage bonds, for Sinking Fund payment Nov. 1, say.....	52,000
Taxes of 1858, paid and to be paid, say.....	50,000
Interest on 1st mort. bonds, Feb. 1.....	70,000
Three months' accrued int. on 2d mort. to February 1, say.....	31,000
Three months accrued on Sinking Fund to Feb. 1, 1858, say.....	26,000
	291,000

Leaving applicable to a dividend.....\$120,256 which is about 2 per cent. on the capital stock.

Your correspondent truly says: "The Galena Road has no floating debt, and is in good repair, and no line at the West will sooner feel the effects of a revival of prosperity, which is so certain ultimately, to occur," if, I will add, the managers are permitted to conduct its affairs in a sound, practical manner, but much of its future prosperity will depend upon an enlightened and wise policy in relation to the connections yet to be secured to the Dixon and Fulton line, with the roads built, and to be built westerly, in the State of Iowa.

Respectfully, your obedient servant,

JOHN B. TURNER.

The resignation of Hon. John Wilson as Land Commissioner of the Illinois Central Railroad Company, has been announced.

A FEW REMARKS ON BOILER EXPLOSIONS AND THE CAUSES TO WHICH THEY ARE ATTRIBUTED.

BY EDWARD STRONG.

In the *Arlizan* for the month of January I endeavored, in a few words, to bring before the notice of engineers the very unsatisfactory conclusions in many cases come to as to the causes of boiler explosions. Being aware that the views I hold on this subject were at variance with those held by many engineers, I felt it necessary at first to enter very cautiously on so important a subject; but having had my opinions on this point corroborated by an eminent engineer—Mr. Roberts, of Manchester—I may venture to enter more fully into this.

We may take it as granted, that it is the wish and duty of all engineers, when one of these unfortunate accidents occur, to use every means in their power to trace out the true cause of the accident; and when commencing such an inquiry, it should be thoroughly understood that in all these cases the accident must have arisen from either a defect in construction, or neglect of the owners or parties in charge of the boiler. And bearing this strictly in view, I can not see but that a satisfactory result should be come to; and the defect or neglect ascertained would be the information engineers require to avoid and remedy for the future. Adopting this system, in preference to that of endeavoring to envelope the case in mystery, we might hope to look forward to boiler explosions being very rare, instead of every day occurrences.

Under the head of "mysteries" may be classed two theories: The first, the supposition of an explosion by hydrogen gas, from the decomposition of water, from the plates of the boiler having become overheated; the second, from the same cause, (overheating of the plates), the water having taken the spheroidal form. It will be necessary to treat these two theories separately before entering into plain, practical facts.

The opinion, and which I have often heard expressed by engineers, is that the plates of a boiler (no distinction being made between those of iron and copper,) having become heated to redness from shortness of water, a gas is generated as explosive as gunpowder. Now, it can only be said, that under such circumstances, hydrogen gas, one of the ingredients of an explosive mixture, becomes present in the boiler; but in this state it is harmless, as pure hydrogen will neither ignite nor explode, and only becomes dangerous when mixed with certain proportions of air or oxygen gas, neither of which should be present in boilers working. It is, therefore, evident that this theory rests only on suppositions, commencing at first in doubt as to whether the very fact of the plates being heated to redness, and thereby weakened, may not from this cause have given way and caused the explosion; and ending in doubt as to whether or not the hydrogen gas could have become explosive by an admixture of air, and how this air had become present in the boiler. The whole of this theory should be thrown aside, as at best it can only be shown to be the result of a prior defect, which defect is the one to be looked for, as had it not existed the boiler plates would not have become heated: it is the real cause of the accident. This cause can be easily traced to a practical fault, namely—either the entire

want or improper condition of the lead plug.

But, although iron heated to redness has the property of decomposing water, it must be thoroughly understood that copper has not, as copper will not decompose water at any temperature; therefore, where the boiler is constructed of this metal, or, as in the case of a locomotive, where the fire-box is of copper and the tubes of brass, the decomposition of water from these parts being heated is impossible, and the theory must not be allowed to be applicable to such a case. This I saw unintentionally corroborated in an article on the relative evaporating powers of iron and brass tubes, which appeared in *The American Railroad Journal*, from which I make the following short extract:

"Iron absorbs heat so much more rapidly than copper that many explosions have occurred, which would not, had copper been used; although it is admitted, it is too bad to praise copper for this also, that it will not let a boiler blow up. Copper can not be a good medium through which to raise steam and a bad one to blow up." Now, copper has been proved to be a good medium through which to raise steam, being superior in this respect to iron; and its being a bad one to blow up, is from the very fact that it will not decompose water, when from a defect the metal has become heated.

Water in the Spheroidal Form.—The supposition that boiler explosions have been caused by the water in the boiler having taken this form, arises from this. If a plate of iron is heated to the temperature at which water boils or to certain degrees beyond this, water being then thrown upon it, evaporates in the form of steam, but if the plate is heated considerably beyond this temperature, the result is different, as water then thrown upon it ceases to evaporate in the form of steam, and takes the spheroidal form, which is that of rolling on the surface of the heated metal in globular forms. If this water is allowed to remain on the metal until the temperature of it is gradually reduced to the point when water ceases to remain in the spheroidal form, it then rapidly evaporates in the form of steam. It is, therefore, said that the plates of a boiler may have become so much overheated as to cause the water in contact with it to take the spheroidal form, and that the heat of the plates has afterwards become reduced to the point where the spheroidal form of water ceases, and that then the evaporation of steam becomes so great, that an explosion must ensue. It is mere supposition that an explosion should follow, never having been proved by an experiment, and there is every reason to believe such should not result from this, which I will endeavor to show.

Water is said to take the spheroidal form at a temperature of 340 deg. Allowing this to be correct, the ordinary working pressure of locomotive power is 120 lbs.: to raise steam to this pressure, a temperature of 343 deg. is required; therefore, water at this pressure must be in the spheroidal form, and, according to this theory, whenever the pressure falls say to 110 lbs., the water ceases to be in the spheroidal form, and an explosion should follow; which, I need hardly say, in practice does not take place. But if there is any doubt in this case, we can go still further. Engines have been worked with perfect safety at a pressure of 200 lbs., requiring a temperature of 385 deg. I have seen the pressure of steam in these boilers gradu-

ally reduced to 100 lbs., without the least perceptible result beyond the reduction of pressure. The pressure of steam in a boiler has been raised to 300 lbs., and afterwards reduced, without the least symptom of an explosion. These are facts of themselves sufficient to prove, that attributing boiler explosions to water having been present in the spheroidal form, is an absurd thing.

Water in boilers which are not stationary, must frequently be in the spheroidal form, without any explosion resulting, as from their motion it occurs that a portion of the plate exposed to the fire is left for a time without a covering of water, this portion of the plate gets overheated, and on the position of the boiler being again altered the flow of water returns, and is brought in contact with the overheated plate. I have never known an explosion result from this, and yet I have frequently seen this occur—as, for instance, a locomotive ascending a very steep incline, and immediately afterwards descending a steep decline. I do not mean to say, that with proper care—keeping the water sufficiently high in the boiler—this would have been; but it is well known that drivers do often let the water fall rather too low, and that water in the spheroidal form must frequently be present in the boiler. But it is evident that water being present in a boiler in this form, can never of itself be the cause of an explosion; and such being found, the theory should no longer be allowed to be brought forward as a means of accounting for such accidents.

If these two theories may be allowed to be finally disposed of, the inquiry becomes a simple affair, as we have thus only to deal with mechanical defects, and these may be classed under three heads, which are, firstly, *insufficient strength of boiler* (from whatever cause this may have arisen, whether from weakness in original construction, or worn so from being long in use, or from a neglected leakage, or plates injured by action of fire, from either an accumulation of dirt in boilers or insufficiency of water); secondly, a *defective safety-valve*; and lastly, a *defective lead plug*. All boiler explosions may, with certainty, be said to be caused by one of these three defects.

Insufficient Strength of Boiler.—As regards the construction of boilers, no rule can be laid down as applicable to all cases—so much depends upon the pressure and quantity of steam required to be generated; but, as regards the form of boilers, one rule may safely be applied to all—that is, to adhere as closely as practicable to the circular form in all the parts. With the large flat surfaces, weakness may be said to commence, for however well these parts may apparently be stayed, they are in nearly all cases the weakest part of the boiler, and the one most likely to become deranged—the strain on the stays is always more or less unequal. Where the pressure of steam is high, and the quantity required to be generated great, it is always safer to increase the number of the boilers, rather than to increase their dimensions beyond certain limits. Of the strength of boilers, engineers should not be satisfied by only having ascertained, by their calculations, that the boiler they have constructed is of amply sufficient strength for what is required of it, when it thus leaves their hands new; but they should satisfy themselves that there is an excess of strength sufficient to compensate for the wear of the plates during the number of years boilers are, in general, con-

sidered workable. But even allowing that the calculations in all points have been correctly made, this is not of itself sufficient to insure strength, as flaws may exist in the metal, which the most practiced eye can not detect, making all calculations valueless. The only means to insure against these defects is, testing the strength of the boiler by hydraulic pressure to at least double the pressure it is intended to be worked at. But for this to be an effectual safeguard against explosions from weakness of boiler, it is necessary that this testing be renewed periodically—say annually—which can very easily be done. One of the most common causes from which boilers become weakened, is a neglected leakage; it may often be seen how a plate originally three-eighths inch thick is rapidly reduced to one-eighth inch, by the corroding action of the water escaping from the faulty part. A leaky boiler may also be said to be an encouragement to the party in charge of it to allow an accumulation of dirt in the inside of it, as he finds the leakage less troublesome when the boiler is in this state, and thus the injury to the boiler increases, as where the dirt is, the water can not be in contact with the plate, and then the action of the fire upon it is very injurious. This also greatly affects the steaming powers of the boiler, the dirt always being a bad conductor of heat. The parties in charge of boilers should be made to understand the great danger which ensues from a leakage, however small, being allowed to continue, and also the necessity of keeping the plates of the boiler as clean as possible.

Defective Safety-valve.—It is absolutely necessary that every boiler should be fitted with a safety-valve; on no account should one safety-valve be allowed to act for two boilers, or, as is sometimes the case, for four or five; in all these cases each boiler is fitted with a stop cock, which has the power of closing all communication between the boiler and safety-valve. It is therefore possible that, either from accident or neglect, this cock may be closed in one of the boilers in which steam is being generated: an explosion would then be inevitable. The danger of this system of construction is so plain to every one, that it may be supposed to be sufficient for its own remedy; yet it is not so, as this system is extensively in use; and what appears still more strange is, that even in the Government service it is adopted, or, perhaps more properly speaking, allowed. On the necessity of every boiler having a separate safety-valve, I would go still further and say, each should be fitted with two, as in a locomotive. It is possible that one valve may become locked, but it is almost impossible that two can be so at the same time. I will not attempt to give an opinion as to which is the best arrangement of safety-valve to adopt, there are so many different plans, but those which are the most simple should be preferred, being less liable to become deranged. Explosions are frequently caused by safety-valves having become locked through a defect; these defects are various, although all leading to the same results. What would assist in preventing this, would be making all the working joints of brass, which would not thus become corroded by the action of the steam. At present, the lever and working joints are of iron; they become so corroded by the continued action of the steam, that considerable force is often required to work them. It may be said that a brass lever would not be of sufficient strength, but this objection might be avoided

by allowing the lever still to be of iron, and at the working joints to face and bush it with brass.

Safety-valves often become locked, although in perfect working order themselves, from a defective arrangement of the spring balance; this is an error which is unfortunately very common. If we take an ordinary spring balance, constructed, say to work at a pressure up to a 120 pounds, in screwing it down to this pressure it will be seen that the index finger is brought within one-eighth of an inch of the guard at bottom of balance; this, with the ordinary arrangement of lever, gives only 1-40th of an inch for the valve to rise; and even this is not its most dangerous feature, as if the connecting rod to which the balance is attached is not adjusted with the greatest exactitude, but left one-eighth of an inch too short, on the nut of balance being screwed home, the index finger rests on the guard of balance; thus the safety-valve becomes effectually locked. I have known lives lost from an explosion which I could only attribute to this, which might be thought a trifling defect. The index finger should always be at least one inch clear of the bottom guard of balance, after the nut is screwed home.

One of the safety-valves of a boiler should always be within easy reach of the person in charge, so that he may frequently try if the valve is working freely.

Defective Lead Plug.—To this cause should be attributed all boiler explosions from overheated plates. The safety of the boiler depends as much upon the lead plug being in proper condition, as upon the state of the safety-valve. Men may neglect their duty and allow the water to fall too low, but when the boiler is fitted with a proper lead plug, the most serious result which can follow this neglect is the fire being extinguished. A lead plug to be in proper condition should be renewed monthly, and of sufficient size, not less than one inch; where they are thus used, the overheating of a boiler from scarcity of water, is a matter of impossibility. But, notwithstanding this, the lead plug has got into disrepute, not from any defect of its own, but from neglect or ignorance of those whose duty it should have been to have seen it kept in proper condition. The result of this is, that a number of boilers are now not fitted with lead plugs, or else where they are fitted in at first, they are afterwards so much neglected as to be perfectly useless when their safe action is required. The proper use of the lead plug should be insisted upon as one of the greatest means of safety.

The means to be adopted for preventing boiler explosions may be summed up in these few words: the strength of the boiler to be annually tested by hydraulic pressure to double its working pressure; a leakage, however small, to be at once stopped; the boiler kept clean; the boiler to be fitted with two safety-valves, and a lead plug kept in proper condition. Where these directions are strictly attended to, a boiler explosion may be said to be an impossibility.—*London Artizan.*

★ The earnings of the Panama Railroad for the month of October were—

In 1858.....	\$142,000
In 1857.....	114,000
Increase.....	\$28,000

The labor account of the road is less than last year, and the net profits show a satisfactory increase.

PROVIDENCE, HARTFORD AND FISHKILL R. R. COMPANY.—The following is a condensed statement of the financial condition of the company on the 1st of October, 1858:

ASSETS.	
Construction, cost of road from Providence to Waterbury, 122½ miles	\$3,903,455 46
Equipment	301,510 93
Total cost of road and equipment	4,205,966 39
Materials on hand, wood, &c.....	29,318 20
Sinking Fund, cities of Hartford and Prov. Idence.....	48,777 14
Sundry notes and accounts.....	6,917 09
	\$4,308,307 35
LIABILITIES.	
Old stock issued	\$1,537,939 98
Preferred stock sold.....	388,800 00
Bonds sold.....	1,662,730 60
Sundry Notes and Accounts payable.....	319,951 78
	4,119,431 76
Excess of Assets.....	\$188,875 59

The road is in the hands of trustees for the mortgage holders, under the respective deeds of trust in Connecticut and Rhode Island, but by mutual agreement, the trustees are operating the road as a whole from Providence to Waterbury. The operating expenses have been reduced to 52½ per cent. of the gross earnings of the last eight months, and to less than 50 compared with the earnings of the last three months. The directors declare their belief, that the road being economically managed, will: 1st, Pay in full the current and back interest on its mortgage bonds, and in due time pay the principal of said bonds in full; 2d, Will pay in full, with interest, all the floating debts of the company; 3d, Will pay dividends on the preferred stock after the floating debt is paid off; 4th, After some years a small but steadily increasing dividend on the original stock may be expected; but if the creditors force the company into bankruptcy, and compel a sale of the road, the above results cannot be worked out. It is hoped that in view of the interest of all parties, creditors will be indulgent.

COAL BURNING ENGINES.

COAL BURNING LOCOMOTIVES ON THE HUDSON RIVER RAILROAD.

OFFICE OF THE SUPERINTENDENT, }
NEW YORK, Nov. 8, 1858. }

JOHN A. HAVEN, Esq.—Dear Sir: I send you herewith the promised statement of the performances of four of our coal burning locomotives. The record here made has not been selected, but is the result of a long series of consecutive trips.

The engines used are of a form designed by the General Superintendent of the road, Mr. A. F. Smith, and have, as a prominent feature in their construction, the long combustion chamber projected into the barrel on the boiler.

The work has been performed in running round trips from New York to Poughkeepsie and return, a distance of 145 miles. The amounts of coal used are for that distance, the engines making the run up and back without drawing the fires.

The engines Michigan and Sam Sloan ran altogether with passenger trains; the trip north-west occupying two hours and three minutes, with nine intermediate stops, and the return trip about two hours and ten minutes, with five stops. The engines Irvington and Stuyvesant, during the trips here recorded, were employed in one direction on the way freight trains, making the trip in four hours and forty-five minutes with twenty-seven stops, and on their return with through freight occupying four hours and thirty minutes with three stops.

In comparing the economy of the coal en-

gines with those doing the same work with wood, although no extended trial of the wood engines has been had, it is confidently believed that the estimate made is a low one, and within the actual amount.

The price of the fuel has been for coal \$4.80 in the tender; and for wood \$6 per cord.

Very respectfully yours,

MENDES COHEN, Ass't Supt.

NAME OF ENGINE.	CYLINDERS.	Driving wheels.	Area of grate sq. feet.	Num-ber of trips.	Total number miles run.	Average number cars.	Total amt of coal used in pounds.	Am't of coal used per trip.	Am't of coal used per mile.	Cost per trip per mile \$ cts.	Cost per mile \$ cts.
With passenger trains:											
Michigan.....	16	22	19.8	46	6,670	5 1/2	152,875	3,321	22.9	7 1/2	4 9-10
Sam Sloan.....	17	20	13.5	47	6,815	5	165,466	3,521	24.3	7 5/8	5 2-10
With freight trains:											
Irvington.....	16	22	13.55	25	5,075	13 1-8	132,805	3,799	26.2	8 1/4	5 6-10
Stuyvesant.....	17	20	13.1	26	4,930	13 5-8	136,878	4,388	30.6	9 5/8	6 5-10
Performance of Wood Engines.											
With passenger trains—same duty as Michigan and Sam Sloan.										21 00	14 5-10
With freight trains—same duty as Irvington and Stuyvesant.										30 00	19 7-10
Showing an economy in favor of coal.										65 per cent.	71 per cent.
On Passenger trains of											
Cords of Wood.											
3 1/2											
5											

day, contains the following on the same subject:

Much attention has been paid to the introduction of coke and coal as fuel for the passenger engines, and special attention is requested to the report of the master of machinery on this important subject. The results have proved highly satisfactory—the engines operating very economically and efficiently. Experiments with fuel, made with the same engine, running with mail and express trains, hauling in each case five cars, resulted as follows:

With wood, 7-8 cts. cost per mile run.

With coke, 5-6 cts. cost per mile run.

With coal, 3-6 cts. cost per mile run.

Fourteen of the passenger machines are now consuming mineral fuel, and the master of machinery recommends the alteration of others, as soon as the large accumulation of wood on hand is sufficiently reduced to render it advisable.

The great economies to be thus effected must attract the attention of managers of railroads generally, and add largely to the consumption of bituminous coal.

IMPORTANT DECISION

Of the Commissioner of Patents, communicated by Knight & Bros., Solicitors of Patents, Cin., O., and Wash., D. C.

U. S. PATENT OFFICE,
Nov. 10, 1858.

In the matter of the interference declared between the applications of Bernard Lauth and Richard and Dennis Savary, for a patent for a new article of iron manufacture.

The product for which a patent is sought by these applicants, appears to occupy, as a metal, intermediate ground between the iron of commerce from which it is manufactured, and steel, which it approximates in its qualities of tenacity, and strength, and smoothness. This result is arrived at by first scaling the iron through an acid bath, and then rolling it cold under a heavy pressure through polished rollers. By this process, the fibres are compressed, or packed, and an extraordinary toughness and strength given to the metal, while at the same time it receives a perfectly even and burnished surface. The scaling of iron by treating it with acids is well known, and has been long practiced. Iron, too, has been cold rolled, as stated by the Examiner—and this, indeed, is the common mode by which it is prepared for tinning. This invention, then, does not consist in either of these processes, as heretofore, but consists, as I understand it, in cold rolling iron under an extraordinary degree of pressure, hitherto unknown, and, indeed, deemed impracticable, whereby the qualities claimed for this product are imparted to it. An impression has heretofore prevailed, that the fibres of cold iron could not bear this compression without being bruised, and the character of the metal deteriorated. This discovery exposes that delusion. That the metal produced by Lauth possesses the characteristics enumerated above, and distinctly set forth in his specification, is fully estab-

lished. The test to which it has been subjected, leaves no room for doubt on this point. The sagacity of the trade seems at once to have appreciated the importance of the discovery which promises to constitute a remarkable epoch in the history of iron manufacture.

Lauth is clearly an original inventor, and he must be entitled to a patent unless it can be shown that the same invention was made by another before him. It is insisted that the Savary's preceded him some three or four years, and their claims to be recognized as inventors presents the only embarrassing question in the case. In examining it, I shall accept as true the statement made alike by their confidential friends, and by the daughters of Richard Savary. The evidence of the latter is marked by frankness and intelligence, and, no doubt, describes with entire accuracy the progress and results of their father's experiments as they understand them. It is then manifest that, as far back as 1854, Savary entertained the idea the iron might be cold rolled under a pressure that would improve its quality, and that he made a number of experiments to test the soundness of his theory. He subjected various small pieces of this metal to the acid bath, by which they were scaled, and then passed them, while cold, through small polished rollers. The witnesses who were present, or who afterward saw the pieces of iron thus treated, say that they had a smooth, bright surface, and some of them thought they were stiffer than ordinary iron. These pieces were subjected to no tests by which their qualities could have been ascertained. They were looked at and handled only. They have been since lost or destroyed, so that it is impossible to determine their actual character. As the claim is not for a process, but for a new product, the qualities of that product must be proved, since they are the very essence and soul of the invention. The witnesses, however, only depose that the product was smooth and bright—but these are no part of the invention—and that, in their opinion, it was stiffer than the iron of commerce. This, however, is but an opinion, faintly expressed, and resting upon the most inconclusive ground. An opinion as to the relative strength of such pieces of iron, formed from simply handling them, does not seem to deserve a moments consideration. If any witness had stated that the heavy pressure, now conceded to be essential to produce the desired result, had, in fact, been employed by Savary in his experiments, it might have been inferred that the product had the qualities insisted on for it, but no witness has made an allegation, or intimation to that effect. The pressure may have been great, or it may have been slight. That it was not very heavy may be safely concluded from the small rollers employed, and from the fact that they were operated by

[The above very concise statement, made by Mr. Cohen, will, we think, attract considerable attention; especially from railway managers who have not already commenced that change in fuel which has become so urgent a necessity in the more thickly settled portions of the country. This matter of fuel is constantly becoming more important, not only to the interests of railway property, but to all other interests in the country. The forests are being rapidly burned up, the price of wood must now of necessity, advance at a fearful pace, unless we adopt other fuel for the five or six thousand locomotives in the country. Our railway friends will readily appreciate the value of Mr. Cohen's statement, and we trust that all those who have gained any experience, will give it the same publicity. It is a debt that they all owe to the general welfare of the railway system of the country.—Ed.]

It is proposed to add to the preceding that the coal used by the Hudson River Railway was furnished by the Cumberland Coal and Iron Company. The annual report of the Baltimore and Ohio Road, made on Mon-

from the public eye the character and product of his experiments, but at the same time, from sloth, indifference, or other causes he permitted to perish the only proofs by which the qualities of that product could be satisfactorily illustrated and established. The resuscitation of these lost evidences is now a physical impossibility, and there is nothing which can supply their place. The result to Savary, in view of his sluggish and illiberal action, is not to be deplored. In an age and country far less active and progressive than ours, the maxim, *Vigilantibus et nondormientibus jura subveniunt*, was adopted as a principle of the public law; it has been embodied in our own code of jurisprudence, and its spirit eminently pervades our patent laws, which favor vigilance in developing inventions

and furnishing tangible, appreciable proof of their existence, and exacts that the inventor, who, in misguided calculations of interest, or insensibility to the value of what he has discovered, shall suffer the only evidence of its existence, of which the senses of the world can take cognizance to perish, must virtually and for all practicable and legal purposes, be held not to have made the discovery at all. Such is the position in which Savary has placed himself. Lauth on the other hand has frankly avowed his invention, and promptly sought the protection of the government, while upon a most extensive scale, and in a most enterprising and liberal spirit, he is giving the benefits of it to the world. Priority of invention is therefore adjudged to him, as recommended in the request of the Examiner, which is hereby confirmed and the application of the Savarys is rejected.

J. HOLT, *Commissioner.*

MONETARY AND COMMERCIAL.

There has been an increased demand for money during the week past, but the supply is equal to the demand, and good names on short time is readily taken by the leading houses at former rates. As the Pork season advances, we may however expect a little more stringency in money affairs.

The supply of Eastern Exchange is abundant, and prices have a tendency lower. Nothing doing in New Orleans.

The N. Y. Courier and Enquirer of Monday morning, relative to the stock market, remarks:

The Stock market assumed a better aspect this morning, with a rise of $\frac{1}{4}$ to $\frac{1}{2}$ per cent. The sales of Railroad Shares were mainly on time, with a stronger disposition to purchase than for some days past. United States Five Per Cents maintained the recent quotations. The sales of Missouri Sixes were largest, 89 $\frac{1}{2}$ to 90. Virginia Sixes advanced $\frac{1}{4}$. North Carolina, according to the official statement this week showed, that the finances of the State are managed with rigid scrutiny and caution. The aggregate on the 1st ultimo was \$6,879,000. All the companies to whom the credit of the State has been loaned have, with two exceptions, paid the interest on the bonds issued to them. These exceptions amounted to \$700,000. The principal change to day in values was an advance in Erie Sinking Fund Bonds from 38 to 40—an advance of $\frac{1}{2}$ since the end of October. The Convertibles of 1-71 also brought 40. Harlem Shares are held at 127.8 to 1 and the Prefer end at 30 $\frac{1}{2}$ to 31, while their First M. R. Shares are selling at 88 only. The Hudson River Railroad Company show better receipts for the current year, and the Shares are selling at 34 $\frac{1}{2}$. At the Second Board the prices of the morning were not fully sustained. The market is still weak.

The Boston Transcript learns that fifty-eight Banks only which kept a special d-p-o it at the Suffolk Bank have transferred their business to the new Bank of Mutual Redemption. The former institution will continue to redeem after the 30th inst. on the following terms: All bills coming through these city Banks from Banks in New England having special deposits with the Suffolk Bank, to be free of charge. And all other bills to be paid for by these city banks at the rate of 25 cts. for \$1000.

The Secretary of the Interior has approved on the State of Florida a grant for 284,568 acres of land enuring to that State under the act of May 17, 1856, to aid in the construction of railroads. This grant is applicable to the Florida Railroad Company, which extends from Fernandina, on the Atlantic, to Cedar Keys, on the Gulf, one of the most important lines, probably, in the extreme South. The entire route, it is expected, will be in full operation at the beginning of the year.

Relative to the hog market the Cincinnati *Price Current* says:

"At the close, last evening, hogs averaging 200 lbs. could not be sold at much over \$6 50 though \$6 60 and in some cases \$6 75 were asked, but there was an evident disposition to hold back on the part of buyers. Mess Pork has been dealt in largely, beginning at \$16 50, falling back to \$16, and again reaching \$17, and then again falling to \$16 75, at which the market closed last evening. The Eastern men, except one or two from Boston, have not done any thing of consequence, so far. Parties from Boston have been buying pretty freely.

"Bulk meats have been sold to a considerable extent, for future delivery, chiefly January and February, beginning at 6 $\frac{1}{4}$ @8 $\frac{1}{4}$ for Shoulders and Sides, and leaving off at 6 $\frac{1}{4}$ @8 $\frac{1}{4}$. The transactions in Green Meat have reached 150,000 pieces, closing 5@7 and 8 cents, though $\frac{1}{4}$ higher was paid within the week.

"The receipts of hogs, prepared for this paper exclusively, during the past week, by the various routes into the city, have been as follows:

By Railways.....	46,166
By River.....	4,714
From Kentucky.....	13,195
Driven in.....	1,296

Total for the week.....	65,371
Previously reported.....	36,968

Total for the season.....	102,331
Same time last season.....	39,909

Same time in

1856.....	76,750
-----------	--------

1855.....	73,446
1854.....	56,814

1854.....	76 814
1853.....	99 419

1850.....	59,419
1851.....	118,854

We subjoin the usual quotations from Hewson

Holmes' Circular:

Very little change has taken place in the market for Stocks and Bonds since the date of our last report. The transactions continue fair in amount, without, perhaps, quite so much animation as was manifested two weeks since. Prices are well maintained and that confidence, produced by the increased earnings of our first class roads, is still unimpaired. To the withdrawal from the market of a large amount of money, now being used by our pork men, who are in full blast, may be attributed any unfavorable change noticed in the demand for, or price of, the first class securities on our list.

There has been an active demand for money during the week, which has been freely responded to by our Bankers until within the last two or three days, since which time currency has been in less supply, and negotiations more difficult. The rates, however, for strictly first class names remain at 10 to 12 per cent.

Exchange on the East is in full supply, and we quote rates par to $\frac{1}{4}$ prem. On New Orleans, $\frac{1}{4}$ to $\frac{3}{4}$ prem. Gold par to $\frac{1}{4}$ prem.

CINCINNATI STOCK SALES.

BY HEWSON AND HOLMES.

November 24, 1858.

BONDS.

\$6,000	Maline Water Power and Manufacturing Co. 10 per cent. Bonds.....	51
\$3,000	Cincinnati & Chicago R. R. Co. 1st Mort. 6 per cent. Bonds.....	33 and int.
\$10,000	Cincinnati, Logan and Chicago 1st Mort. Sterling Bonds.....	4 "
\$7,000	Little Miami R. R. Co. 6 per cent. 1st Mort. Bonds.....	82 "
\$4,000	Cin., Ham. & Day R. R. Co. 7 per cent. 2d Mort. Bonds.....	72
\$2,000	Cov. & Lex. R. R. Co. 7 per cent. 2d Mort. Bonds.....	30
\$1,150	Indianapolis & Cin. R. R. Co. 7 per cent. Dividend Bonds.....	70 "
\$2,000	City of Covington, Ky., 6 per cent. Bonds.....	60
\$3,000	Cin., Ham. & Day R. R. Co. 7 per cent. 1st Mort. Bonds.....	90
\$1,000	City of Cincinnati 6 per cent. Municipal Bonds.....	90

STOCKS.

109	Shares Little Miami R. R.....	81
115	" " ".....	81½
25	" Columbus & Xenia.....	81
100	" Cin'ti., Ham., & Day.....	50
57	" Indianapolis & Cincinnati....	45
50	" Ohio & Miss. R. R.....	5
126	" Cin. Insurance Co.....	95

INDIANAPOLIS AND CINCINNATI RAILROAD.—We understand, says the *Railway Times*, that Mr. Lord, the President of this company, has lately been at the East, and reports an encouraging account of the condition of that road, which has many shareholders at the East. Since the suspension of dividends, the floating debt has been reduced from \$248,000 to \$120,000, and \$18,000 of bonds have been redeemed. The amount of earnings which have been expended in this way is equal to nine per cent. on the capital stock. The earnings of 1858 show a moderate falling off compared with 1857, but the tide has turned, and October shows a very respectable gain. If the balance of the floating debt was funded, which the President is endeavoring to arrange, the road could, in January, resume the payment of dividends.

MISSISSIPPI, OUACHITA AND RED RIVER R. R.—The *Lynchburg Virginian*, in noticing the fact that 700 tons of rails are to be manufactured for their road at Paducah, Ky., says:

"When shall we have the gratification of announcing that Virginia has commenced the manufacture of iron rails for herself? Georgia, Maryland, Kentucky, and other Southern States are already pointing the way, but Virginia, with the finest resources of them all, yet lags behind. Who will be the first to enrich himself, at the same time that he become a public benefactor, by inaugurating an enterprise of this sort in the Old Dominion."

TEXAS STATISTICS.—We have received the full returns from the county assessors for the present year, showing the total value of taxable property in the State to be \$192,387,377, against \$183,594,205 for 1857, and \$161,504,025 for 1856. The total State tax, *ad valorem*, for this year, is \$268,883 05, against \$301,126-54 for 1857. Had there been no reduction in the rate of taxation, the total taxes would have been \$323,875 27; so that the State has lost by the reduction \$54,992 22.—*Galveston News*.

ERIE AND PITTSBURG RAILROAD.—The Cincinnati *Commercial* states that the rails have been laid upon nine miles of this road. Another mile will be laid this Fall. It is in contemplation to have this line in running order as far as West Greenville, early in the Spring.

THE GRAPE CROP IN FRANCE.—The vintage now in active progress in France is reported as likely to prove one of great abundance.

RAILROAD TO CHICAGO.—The cars commenced running between Philadelphia and Chicago yesterday, the Pittsburg, Ft. Wayne and Chicago Railroad having been completed. This road being under the same management as the Pennsylvania Road, is now the longest route of uninterrupted railway in this country, being eight hundred and twenty-four miles. The freight between Buffalo and Chicago will be about four dollars per ton less than from New York, and six dollars per ton less than the freight from Boston to that point. Baltimore, by the Northern Central Railroad, connecting at Harrisburg with the Pennsylvania Central, has all the advantages of this completed line of Railroad to Chicago. In fact, Baltimore is, by this route, twenty miles nearer to Chicago than is Philadelphia.

It is stated that the Postmaster-General will recommend in his report an entire change in our postal system, and will urge upon Congress the establishment of a number of a new and important lines to connect with various parts of South America.

VICKSBURG, SHREVEPORT AND TEXAS RAILROAD.—We learn from the *Shreveport Gazette* that the Directors of the Vicksburg, Shreveport and Texas Railroad, report very favorable in reference to the financial condition of the Company. There are over \$12,000 in the treasury after meeting all the indebtedness of the Company. Iron has been purchased to lay the track to Bayou Mason, a distance of forty miles. The road is graded to Monroe, and will be completed as soon as the iron is purchased.

☞ The *Montreal Herald* learns that Mr. Shanley is about to leave the management of the Grand Trunk Railway. A gentleman from Scotland is expected to succeed him.

CINCINNATI TO MEMPHIS BY RAIL.—A Railroad connection has been opened between Columbus and Memphis, by way of the Mobile & Ohio Railroad, connecting with the Memphis & Charleston, and passengers were arriving at Memphis by that route in 13 hours from Cairo.

The time Saint Louis to Cairo, by railroad, is 7 hours, which added to the 13 to Memphis, bring St. Louis and Memphis within 20 hours, and Cincinnati and Memphis, via Sandoval and Cairo, within 30 hours of each other.

ALLEGHANY COUNTY BONDS.—The decision of the Supreme Court, requiring the commissioners of Alleghany county to levy a tax for the purpose of paying interest on the railroad bonds, has caused great excitement in that community. The *Pittsburg Dispatch* says, that two members of the Board of County Commissioners are pledged to disobey the mandate of the Court, and continues:

"What the result will be we are unable to predict. Were the people of Alleghany county the whole State, we should say the tax would not be paid—but they are but the twentieth part, while the United States Government is bound to sustain the Executive in enforcing the laws of the State, and the decrees of its courts, against any rebellion or insurrection. Under these circumstances it is nonsense to talk of armed resistance as likely to rid our people of the burdens complained of, grievous though they may be. The property holder dreads taxation much, but he dreads anarchy more—and will closely calculate whether an armed (or even an unarmed) resistance to what has been decided to be law—the 'shooting of tax-collectors,' and other remedies now proposed are not 'worse than the disease'—whether such a course by plunging a community into anarchy and staining our soil with blood, would not only render life unsafe, but depreciate the value of property to a much greater extent than the imposition of such a tax, however unjust, or however hard to be borne."

EDWARD J. MANSFIELD, C. E.

OFFERS his services on Railroads, Turnpikes, or Civil Construction. He has been employed for several years in Ohio, and Tennessee, as assistant Engineer.

Refer to—
E. J. Mansfield, } Cincinnati.
T. Wrightson, }
A. Kenney, Iowa.
C. Davies, New York.

oct. 7-4b.

DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

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Feb. 167* JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

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Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 298 H Street, Washington, D. C. april 2

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CONTENTS.—Lotteries, Gift Enterprises.

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No. 4 In preparation, same subject as No. 3.

No. 5) Tricks and Traps of Horse Dealers.

No. 6) By "Frank Forster."

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July 14, 1857.

js23-1m

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Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

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Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Supt Terre Haute & Richmond R. R.

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PATENT PORTABLE CIRCULAR S-W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Hand Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

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1,200 K&S No. 1 Railroad Spikes, 5½ by 9-16th,
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LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

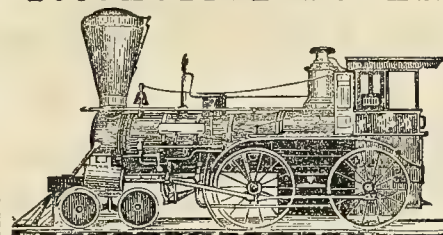
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Supt.

E. F. FULLER, General Ticket Agent. my13

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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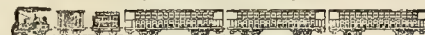
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OHIO AND MISSISSIPPI

(BROAD GUAGE)



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TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.

Omnibuses call for passengers.

WOOD ENGRAVING.

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MIDDLETON, STROBRIDGE & CO.,
Jan 8 1y 119 Walnut st., Odd Fellows' Building

Monday, May 31, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 A. M.—Dayton, Indianapolis and Chicago Express.

7.30 A. M.—Dayton, Lima and Sandusky Mail Express.

4.30 P. M.—Dayton, Sydney and Sandusky Night Express.

4.30 P. M.—Richmond, Indianapolis and Chicago Express.

6.00 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6 A. M. Dayton Train connects at Richmond, with Indiana Central Railroad for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

7.30 A. M.—Dayton Mail, Connects with Sandusky and Dayton Road, for Sandusky and all points on that Road; at Clyde for Cleveland, Dunkirk and Buffalo; at Sandusky with C. & T. R. R. for Toledo; at Sandusky with STEAMER BAY CITY for Detroit, connecting with the Michigan Central and Great Western R. R. of Canada.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Pittsburgh and the East; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

4.30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with trains on the B. & I. Road for Pittsburgh and the East.

4.30 P. M. Indianapolis and Chicago Express connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all point on the Illinois Central Road.

6.00 P. M. Train for Hamilton.

RETURNING TRAINS

Leave Dayton at 8.05 A. M., 2.30 and 6.0 P. M.

Leave Hamilton at 6.55 A. M., 9.40 A. M., 12.10 P. M. and 4.05 and 8.00 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

Racine and Mississippi Railroad.



THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

H. S. DURAND, President.

ROBERT HARRIS, Supt.
Racine, May 15, 1857. my21

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.
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GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
STEAM BOILERS and WATER TANKS of any size or description.
SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

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STATIONERS, BOOKSELLERS,
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Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets.
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.
Blank Books of every description, with or without printed headings, got up on short notice.
ANDERSON, GATES & WRIGHT,
(Successors to Jacob ERNST.)
112, Main Street, Cincinnati

SCHENECTADY Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,
AND TENDERS, AND
RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.
The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER HOLLEN Sp't. Aug. 14

D. M. CARHART,
TURN-TABLE BUILDER.

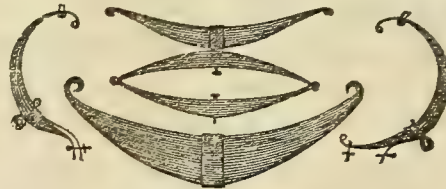
THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address:
Respectfully Yours,

D. M. CARHART,
Box 153 1, Cleveland, Ohio.

T. F. RANDOLPH & BRO.
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MCDANIEL & HORNER, LOCO-MOTIVE AND CAR SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

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I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19.

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EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

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MANUFACTURERS OF
CHILLED WHEELS

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For R. R. Cars & Locomotive Engines,
ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE.
WITH OR WITHOUT AXLES.

WHEELS FITTED
To Hammered or Rolled Axles.
In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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Harlan & Hollingsworth,
WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable freights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. 2c

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THOMAS D. STETSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,
No. 5 Tryon Row, (near City Hall) N. Y.

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1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1855. VOSE, LIVINGSTON & CO.,
Mar. 25, 1f 9 South William St., N. Y.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

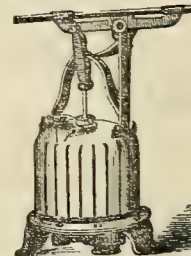
GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND
Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions. Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—1y

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, DEC. 2, 1878.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING

By WRIGHTSON & CO.

Office No. 167 Walnut Street

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Subscriptions and communications addressed to
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Publishers and Proprietors,

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COMPLETION OF THE GRADING OF THE FLORIDA RAILROAD.—The grading of the Road, says the *Fernandina News*, was finished on the 20th inst., and the whole route is in readiness for the rails, except the tressel-work at Cedar Keys, which is rapidly progressing to completion. The track-laying will soon be resumed at Cedar Keys, and the point at which the iron has already been laid; and the speedy completion of the road may be confidently anticipated.

LITTLE ROCK RAILROAD.—We learn from Mr. Robinson, Secretary of the Memphis and Little Rock Railroad Company, that the track laying is progressing rapidly on both ends, and that the road will probably be completed to Madison, on the Saint Francis River, by the middle of November.

IMPROVEMENT IN NEW YORK AND ERIE.—On Wednesday the Bonds of 1871 and 1875 were in demand, in New York, and at higher prices. There is also an unusual activity in its Stock. Negotiations are in progress for a resumption of work on the Long Dock, (Jersey City) property. The receipts thus far in November, show an increase of over \$70,000.

THE COAL QUESTION ON RAILROADS—USE AND TRANSPORTATION.

There are two coal questions on railroads; the use of coal in locomotives, and the transportation of coal as a means of profit. Both are highly important; but, we shall touch on the first but slightly. We regard the consumption of coal in locomotives, as a necessity of railroads, which will work its own way in time. If there were any doubt, on the subject, we consider it settled by the experiments of the Baltimore Co., who say:

"The introduction of coke as a fuel for our passenger engines, has been attended with entire success, resulting in very economical and efficient operation of these machines. A series of experiments have been made with raw coal upon the passenger engines, with results of a satisfactory character, showing conclusively that our passenger trains, containing five cars, can be drawn over the first division of the road, overcoming grades of eighty-three feet per mile, with a consumption of 26 lbs. of coal per mile run, costing, including all transportation charges on the coal, three and six-tenths cents per mile.

"The experiments with fuel have all been made with the same engine, (No. 233.) Their results were as follows:

Cost per mile run with Mail and Express Trains, hauling five cars.

With Wood	7 8-10 cts.
" Coke	5 6-10 cts.
" Coal	3 6-10 cts.

Fourteen of the passenger engines are now consuming mineral fuel; others will be altered as soon as the large accumulation of wood on the western division is sufficiently reduced to render it advisable."

Here, then, we have one of the greatest companies in the United States trying, most successfully, the use of coal in their locomotives, and find it much the cheapest fuel. The above experiments prove, that an ordinary passenger train saves four cents per mile, by using coal. Let us apply that to the Little Miami Road. From Cincinnati to Columbus is 119 miles. The morning train then would save \$4 76 each trip. It makes three hundred and thirteen trips up, and the same down. This train would, therefore, save \$1,489 88 per annum. The three trains of the road would save \$4,469 64 per annum. Including freight trains, the road would save \$10,000 per annum. The only objection we have heard is that, the furnaces of the locomotives burn out sooner, and more repairs are needed. We do not find, that the Baltimore Company has noticed this objection; nor do we suppose it to be important, for the locomotives and furnaces can be adapted, by change of material, or form, to this kind of fuel.

The transportation of coal on railroads is a matter of very great importance in a two-fold aspect. Our country is full of coal, and

the need of it, both for fuel and manufactures, is very great. The demand is almost indefinite, provided it could be got cheap. But, in reality, coal is high. In New York, and even Philadelphia, it averages \$5 00 per ton, which is about (18) eighteen cents per bushel! Now, we know that coal can be profitably retailed at ten cents per bushel,—it is evident that the coal trade is not yet economized, so as to bring out the best results. If coal can be carried at a moderate price on railroads, and marketed at a moderate price, it is quite evident that two great objects will be accomplished, viz., much greater receipts to the railroads which penetrate coal regions, and cheaper fuel for manufactures.

Let us see whether this is possible, by examining some practical facts, connected with coal operations.

1. Take the practice of the Baltimore and Ohio Company, the coal operations of 1858 have been as follows:

Amount of coal	332,797 tons.
Coal freight	\$865,000
Distance	190 miles.
Average per ton freight	\$2 60

This makes the transportation of one ton of coal for one mile—1.36 cents. This will make \$1 75 freight on a ton of coal, from the Coal Mines of Jackson county to Cincinnati.

Now, let us look at the actual cost of coal mining, including a handsome profit to all parties concerned. We take the following statement of mining at Picton, (Nova Scotia,) as given by Mr. SHAFER, Engineer.

"The coal is mined by the cubic yard at prices varying from 26.7 cents to 36.7 cents, but the bulk of the coal is mined at the first mentioned price; these prices are equivalent to 28.8 and 33 cents per ton of 2,240 lbs., respectively; we may estimate the cost of production as follows:

Miner's Wages	30 cents per ton.
Underground transportation	09 "
Timbering	02 "
Firemen, watchmen, and road cleaners	02 "
Foremen, engineer and firemen above ground	03 1/2 "
Tools, materials, and sundries	08 "
Salaries (managers and subordinates)	09 "
Cost at mouth of the pit	63 1/2 "
Transportation, screening, and loading on ships	10 1/2 "
	73 3/4 "

Say cost per ton on Board

The freight to Boston, by sea, is about \$2 00 per ton, and to New York about \$2 50. The Company, or proprietor's profits, will be quite high, at 60 cents per ton. At this rate, coal from Nova Scotia can be sold in Boston (allowing for contingencies,) at \$3 50 per ton, and in New York at \$4 00. Picton coal, therefore, can undersell the Maryland and Pennsylvania coal in New York as well as Boston, and actually does. Immense quantities of Nova Scotia coal is imported into the United States.

Now, let us see how these facts bear on

the Ohio coal trade. At the rates given above, (and except railroads) they are all higher than they are found to be in Ohio, we have this result:

Mining	75 cents per ton.
Profits of Proprietors.....	60 " "
Freight on Railroads.....	\$1 75 " "
Average cost of a ton of coal in Cincinnati.....	\$3 10 " "

This is just eleven cents per bushel; but, as we said, the Ohio coal mines are all much more easily worked, and the amount of capital required here much less. These two causes will reduce the cost at least one cent per ton. Thus we have ten cents per bushel for coal delivered by railroad in Cincinnati, amply enough to remunerate all parties; but, in the winter of 1856-7, when there was a sudden demand for coal, at high prices, the Marietta Road delivered about 300,000 bushels, as high as fourteen cents or more. The truth is, neither the Road nor the mining company were prepared for this business. Why not prepare themselves and do a great business? It is entirely within their power to sell 3,000,000 bushels of coal in Cincinnati, at even eleven cents, and at ten they can sell more. The consumption of Cincinnati is now fifteen million bushels per annum. One-fifth of this is three millions; which would give the railroad \$185,000 freight, and the proprietors \$64,000 profits. Such an operation as this would change the whole front of the Marietta Road, and in the end lead to much greater results.

So, also, of the *Wilmington and Zanesville Road*. Their proper market for coal is in the North-west; and with the roads already made there, it is only necessary to make a connecting link with Xenia, to make that a coal road of great profit; so, also, with the *Cleveland and Mahoning Road*, and also the *Cleveland and Zanesville*, and the *Pittsburg and Ft. Wayne Road*. All these lead from coal regions to places where there is no coal. The shores of Canada, for example, have no coal, and whence can all Canada be better supplied than from Cleveland?

On this subject, Mr. Sheefer well remarks:

"It has been supposed by many that the reciprocity treaty would have an injurious effect upon the coal trade of the United States, but while our sea-board towns are open to the coal of Nova Scotia, (where, as we have not seen the importation is not directly injurious to our coal trade,) there is a corresponding advantage which should not be overlooked. Canada has no coal along her whole frontier, and should the reciprocity treaty develop the industry of that colony as much as is supposed by those who fear the operation of the treaty, it is hardly to be doubted that the mines of Pennsylvania, Ohio, and finally of more Western States, will find a profitable market. The balance

of trade in coal may reasonably be hoped to turn largely in our favor."

MEETING OF THE STOCKHOLDERS OF THE SOUTHERN PACIFIC RAILROAD AT LOUISVILLE, KY.

LOUISVILLE, Thursday, Nov. 25.

The Convention met pursuant to call at three o'clock, in the Masonic Hall. On motion of Mr. Golding, the Hon. Jeremiah Morton, of Virginia, was called to the chair, and the following gentlemen appointed Vice-Presidents: John Kipper, California; Franklin Gorin, Kentucky; W. L. Fenton, Tenn.; R. H. Russel, Texas; James Shannon, Missouri; J. M. Conwell, Ohio, and Edwin Post, New York. Mr. R. L. Durrett, John Delafield, and Jacob Swigget, were appointed Secretaries. Mr. Morton, on taking the chair, made a very neat and appropriate speech. The President of the Company, Dr. Fowlkes, being called for, handed in the following report:

REPORT OF PRESIDENT FOWLKES.

Louisville, Ky., Nov. 25, 1858.

To the Stockholders of the Southern Pacific Railroad, of Texas, here assembled in Convention:

GENTLEMEN—We are again convened to deliberate upon matters of grave importance. Since your last adjournment, much has happened which it is my pleasure, as well as my duty, to submit to you; and I beg to indicate herein also a line of policy, the successful prosecution of which I regard as effective in results of most serious weight—serious to yourselves, so far as it effects mere pecuniary gain—serious however, to the cause of your children, your neighbors, and your country, in the early completion of one of the most stupendous enterprises of the world at the present day. In this time of profound peace, our eminent statesmen have been attracted to an inter-oceanic communication between the Atlantic and Pacific oceans, by railway, as the first paramount duty of our government.

Well did Senator Douglas, in his speech of April 17th, last, say: "I believe it is the great national measure. I believe it is the greatest practical measure before the country. I believe that we have arrived at the period in our history when our great substantial interests require it. The interests of commerce—the great interests of travel and communication—those still greater interests that bind the Union together, and are to make and preserve the continent as one and indivisible—all demand that this road shall be commenced, prosecuted and completed at the earliest practicable moment." Well did he also add: "I care not whether you look at it in a commercial point of view, as a matter of administrative economy at home, as a question of military defense, or in reference to the building up of the national wealth, and power and glory—it is the great measure of the age."

Has not the present administration, too, anticipated your action, in its last message to Congress, and confirmed your views, by the present advantages and facilities afforded to Mr. Butterfield's overland mail route, which traverses your proposed line of road through Fort Belknap to El Paso and onwards? And what did not the able report of the Hon. Postmaster General, Aaron V. Brown, represent? The clearness of his foresight has been fully justified by the result.

I have observed from the reports by parties

who have recently traveled across the overland mail route from St. Louis to San Francisco, that the United States mail is now regularly carried by coaches over the contemplated route of the Southern Pacific railroad, for a distance of five hundred and thirty-nine miles, in Texas, viz: From Fort Belknap to Fort Chadbourne, 136 miles, from Fort Chadbourne to Pecos river 165 miles, from Pecos river to Pope's Camp, 66 miles, from Pope's Camp to El Paso, 172 miles—539 miles. The route adopted, known as the present Butterfield overland mail route, shows clearly the judgment and foresight of the contractors in the selection of the same, and the wisdom of the present administration approving and adopting it.

It is true three several lines of route are proposed. From what is hereinafter said on that point in its proper place, it will be seen that in the views I entertain, no undue advantage in favor of our route finds place. There will be business for all, and more than all can accomplish.

Take, for instance, St. Louis, with many roads to the Atlantic; she can not, as at present provided, equal the rapid transit of freight and passengers demanded. Where do you see a railway between prominent points that is not overcrowded with freight and passengers?

Indeed, gentlemen, by the plighted faith of the State of Texas, and her patriotic efforts and munificent offers, you have been largely prompted to invest money, reasonably looking to a profitable return, and as a safe investment of it as stable form of a capital in the Southern Pacific Railroad. But "it is human to err"—we may err. In this case we have not done so, but on the contrary, others may. This is an individual, not a corporate, matter only. No sooner was all your money paid in, than men, pretending to respectability, and some even claiming to be your agents, sought, in a disreputable manner, (to say the least) by legal chicanery, to divest you of every cent you have paid in. They well foresaw the approaching necessity of government in completing so great an enterprise. They had all to gain, but nothing to lose, and staked their characters on the hazard of the cast against your rights.

These matters have heretofore been laid before you as they then existed, up to August and September last. You then were pleased to confirm and sustain me in a position of great responsibility, and, I may add, of even personal peril, from exposure in the frail condition of my health, and incessant vigilance of the continued unscrupulous conduct of that few. With the exception of some excellent gentlemen, to whom I hereinafter beg to pay a proper tribute of respect, I have been compelled, at heavy expense and payment of my own means, to contend against as formidable a conspiracy, or combination, to obtain your rights, without an equivalent, and without your knowledge, as I have ever known to exist.

I now submit the history of what occurred from the date of your last meeting until now.

I am frank to avow that the spirit and determination manifested through the South and West, at our late autumnal meetings, encouraged and nerved me in my resistance to the wrong and in the defense and establishment of the right.

Carrying out the spirit thus indicated by your unanimity of action in many places, by correspondence and personal interviews, I left my home at Memphis, Tenn., on the 22d day of September, on an overland journey to Marshal, Harrison county, Texas, intending to be in time for the court then in session. I reached there safely. We had caused an action to be brought in that court, in order to vacate the invalid sale of your property and franchises, and replace in possession of your officers the property, road, books, franchises, etc., which had been seized and taken possession of adversely to you by

these men, who, under their pretended sale, claimed to own your estate therein, and who allege they are a "new company," invested with your privileges and property, acquired by your money, etc. In my state of health, with a natural predisposition to the diseases of that climate, nothing but a confidence in the triumph of right over wrong, and sanguine expectation of success under this conviction, prompted me to make the sacrifice and the exposure encountered.

Upon my arrival, I urged upon our counsel our reasons for a then immediate trial. The "new company" assumed the appearance of equal eagerness and anxiety with myself to attain the same end. I attach no motive on their then apparent eagerness, but recur to the facts, leaving you and the public to determine them.

Upper a further and fuller understanding of the whole matter, after conference with our counsel, I ascertained that a portion of those claiming to be purchasers under the sale through the invalid trust deed, were defendants, but, being non-resident, were not therefore, properly in court, and had to be brought there by publication, except for unexpected voluntary attendance. The law also required that in order to our certain success, before the commencement of the term, notice to take depositions beyond the limits of that State must have been duly served on every defendant in the case, they having first appeared in court by person, or attorney, etc. Very ample, abundant and material testimony, to be had in the States of Louisiana, Mississippi, Georgia, New York and elsewhere, could not, therefore, and had not, been taken by us, for want of time and a proper notice to non-resident defendants. This would have excluded from investigation most material evidence tending to establish the fraudulent combination of our adversaries, and even of trusted officers, agents, etc., to their own benefit, in violation of every principle, as it is believed, of honor, truth and justice.

Again, from the very nature of the proceedings, as prepared in this case, it became necessary to prove to the court, by record evidence, the origin of your company. These records were not contained in any of the books of the company then in our possession, at Marshall, Texas. I made diligent search for them, but we had them not. I ascertained that the primary organization had been held and duly effected at Tyler, in Texas. I traced out some of the officers appointed at that meeting, but their testimony would have been insufficient in a court of law to establish record evidence, somewhere in existence. I then, through Mr. Bell, attorney at law, tried to procure an examination of the books at Marshall, then in possession of this so-called "new company," thereby, if possible, to supply this record. Mr. Bell, who bore a respectable note from me to W. R. D. Ward, acting as a secretary of this "new company," and formerly the sub-treasurer and secretary of our company, did not succeed in obtaining access to your books, now, as then, illegally withheld from us. It may be proper to add here that, upon affidavit of these and other causes, the case was continued to the next term of that court. After this, I learned from Major Blanche, formerly our chief engineer, but now one of our opponents, that the records of the first meeting at Tyler, to which I have referred, were upon the books of your company, in the office at Marshall, and that it had been Col. Ward's intention to have produced them in court upon the trial.

Ignorant of these facts when I made the affidavit and continued the case, I did not, as a guardian of your rights, think it proper to go to trial blindfold, or to jeopard all, by any precipitate or reckless movement. I am inclined, however, to think that had we this record evidence, we might have ventured a trial, even

without the overwhelming evidence we can obtain by proper depositions beyond the limits of Texas; but, even though in the opinion of some they may have been deemed sufficient for the vindication of your rights, I was unwilling to assume a responsibility so grave as to direct a trial upon only one-half of our case, when the interests of thousands of persons, to the extent of millions of dollars, were at issue.

Very deep interest is felt, generally, throughout Texas, in the successful and rapid construction of this road. After we ascertained the necessity of a continuance by the court of the action at law, the subject of a compromise was constantly spoken of, discussed and urged by every citizen of prominence. Some members of the "new company" appeared then to entertain the same disposition, and a few of them contributed personal exertion to accomplish such a result. Others of them, however, I regret to say, seemed by their actions still to be controlled by the same spirit and design which planned and carried out the invalid execution of the deed of trust, and the pretended sale under it.

Upon the table before me are all the papers and documents, in relation to a compromise, which has been effected, in view of the existing state of things. They are voluminous, and would consume much time in present reading. I present them for your service and inspection. It would gratify me could they have the thorough examination of every member of the company. They will doubtless receive proper attention from you, by your committees, or otherwise. In thus presenting them to you, it is incumbent on me to accompany them with the following statement:

When it appeared that our suit in court was to be continued, I determined to waive formality. I accordingly addressed a communication to our opponents, L. P. Grant, and his associates, proposing a friendly arbitration by way of compromise. I therein even suggested the names of five respectable citizens of Harrison county, (three of them personally unknown to me,) as a committee, whose duty it should be simply to settle and adjust such "points of difference" as should be jointly presented to them. This was met by much delay, and by correspondence unnecessary for me here to read. The "new company" finally acceded to the proposition, and we proceeded to the adjustment of our "points of difference."

You will find the result in the subsequent award of that committee, qualified by the resolutions of your board of directors, under which I acted, lying before you on the table. I took the precaution, also, to place a copy of those resolutions in the hands of the committee at the time I executed the arbitration bond. All these documents, to-wit: the correspondence upon the subject, the proposition submitted by both parties to the committee, the award of that committee, and the preamble and resolutions of your board of directors, are here, and are subject to your investigation. They show with precise accuracy, the terms and conditions of the compromise, and the positions relatively occupied by the contending parties. In view of their importance, I again urge upon you the necessity of their receiving from you a close examination, and your deliberate judgment.

All we have ever sought was the opportunity to pay our debts, protect your interests, and then construct the road with as much rapidity as our means, with due economy, will permit.

From the list of creditors furnished me, the total amount of indebtedness requiring immediate payment approximates the sum of \$327,000. As near as I can ascertain, the following claims are set up as that amount alleged to be due by us, to constitute that sum:

J. T. Grant.....	\$45,515 00
W. T. Scott.....	22,265 00
J. T. & J. S. Brown.....	41,564 46

Hon. J. P. Henderson.....	12,352 14
M. J. Hale.....	17,341 86
Dr. Jos. Taylor.....	7,436 75
W. R. D. Ward.....	8,828 24
E. A. Blanche & Asst Engineers.....	16,620 27
L. T. Wigfall.....	12,392 87
W. P. Hill.....	4,000 00
George S. Yeager.....	12,160 60
W. P. Andrews.....	10,900 00
Union Bank.....	16,040 00
J. M. Taylor.....	959 45
B. Smally.....	318 50
General account rendered.....	58,630 23
Accounts unsettled.....	13,160 00
H. Richland.....	11,547 50
Smith, Lever & Co.....	1,150 00
Protested drafts.....	7,170 60
Fees due lawyers.....	360 00
Salaries.....	800 00
A. M. Hobbs.....	3,000 00
McDonnell, Mills & Co.....	2,915 80

Before any of this debt is paid, however, it is to be passed upon and approved by that committee, who are charged with severe scrutiny of the same. The debt thus ascertained is to be provided for in these several payments, to-wit: at three, five and seven months from the 15th day of October, 1858. We pay, then, only the actual debts created by our company prior to the day of the alleged sale, with one exception. Since our opponents took possession of your property, they have placed our iron upon five miles of road. This act entitles the company to two hundred and fifty-six thousand acres of land under the grants of Texas, it being thus done within the time required by that law. You will recollect we had graded the road bed, and we had bought and paid for the most or all of the cross-ties and the iron. The cross-ties were then lying along the track, ready to be laid down. The iron was at Lake Caddo. As we receive the benefit of their laying down these cross-ties and iron, the expense of which does not exceed in amount about \$35,000, I think this a debt to be allowed, although occurring after the sale.

I am encouraged to hope that this total existing debt may fall short of the amount claimed, especially after its being scrutinized by the committee. I did not deem it proper to descend to details and minutia. To have done so would have embarrassed, if not defeated, the compromise. It might have involved a settlement with each individual claimant. There are some judgments existing, amounting to about \$20,000. Part of these are taken up, and we have obtained sixty days time in which to arrange the rest. There seem also to be outstanding claims against the company of some \$20,000 more of small debts, warrants on any of which, if sued out, might annoy the company.

It is but justice for me here to acknowledge not only the services of our treasurer, Thos. H. Wiley, Esq., but his promptitude and liberality in advancing to the company from his own resources whatever money was absolutely necessary for the immediate wants of the company, at the ordinary interest of the State of Texas. To Edwin Post, Esq., also, we owe a grateful acknowledgment. He, too, out of his private means, has advanced money to meet the exigencies of the company at the time required. Notwithstanding the most rigid economy has been practiced, expenses, growing out of attorney's fees, duties of agents, and incidental matters, of necessity were large. But for the assistance of these two gentlemen, and W. & H. Burkhardt, and Col. C. S. Todd, and some prominent citizens of Texas, I should have been driven to some sacrifice of your property, to sustain your rights. Unsolicited, and without the knowledge of the parties, I deem it right here to add, that the books and corporate records show that Mr. Post, and Stillman, Allen & Co., of New York, have assumed responsibilities, and advanced to the company more available credits for your benefit, and the preservation of your chartered rights, than all others have done.

This is not the proper time to examine mere

details of the affairs of the company, and the actions of its officers

I regret that want of means sufficient to employ suitable clerks, and of access to your records, has prevented so full a detail as I had desired. This, however, will be the duty of your new directory, when they shall have obtained your books, and had opportunity to afford you the results of a patient examination of them.

As far as it was possible, I have obtained sufficient information to satisfy me that the entire debt of your company, with all costs, interest, etc., in the aggregate will be about \$500,000, of which our opponents claim the amount of the several items heretofore enumerated. I do not believe it equals that amount—it can not exceed it. The last amount named and claimed by the opponents of this enterprise must be at once proved for. This alone can free the company, and not only will it repossess you of your property, but it will set free the resources—now in abeyance—on which you can extricate it from further embarrassment, and promptly and efficiently progress with the construction of the road.

You will recollect that at your last meeting, it was recommended that a loan of fifty cents per share be made upon each share of stock, there being about 620,000 shares. Some of the large stockholders aver an inability to make such an advance, even for your temporary use, and the relief of the company; but they propose in lieu thereof to make to the company the liberal surrender of half of the stock they respectively hold. While this may be beneficial to such stockholders as are willing to make this loan, it does not, at the same time, provide the means to pay the company's creditors within the time limited by the terms of the compromise, and thereby free the means of the company, for the present, as it were, tied up from immediate use, by pledges, by hypothecations, and the trust deed and sale before referred to.

Gentlemen, the interest of your company demands that the amount of money claimed by our opponents, and named in the compromise, shall be forthwith raised. You no doubt clearly see that even were ninety-nine hundredths of the stock surrendered, it would not furnish capital to pay this debt. Until that be done, what jeopardy may not hang over your rights by enforcement of executions under the laws of Texas, whether in hands of a marshal, sheriff, or constable? True it is that the surrender of even half the stock is a larger contribution by the stockholder than a mere loan of fifty cents per share, yet this does not meet the exigency. The deficit of \$327,000 must be met in some manner, or the necessary and indispensable relief you seek for will not be obtained. I repeat that were ninety-nine hundredths of the whole amount of stock surrendered, it provides no money to extinguish existing debts. It is idle, gentlemen, to expect investments by capitalists in a company agitated by opposing interests, and threatened with severe litigation, with its property, however, detained from its possession. If the stockholders will protect their rights, all immediate relief must come from them.

It remains with us now to devise means, and act with every energy. All is in your power, if your heart is in it. Will it, and your energy will not only save to you a wise investment for those you leave behind, but your names will be known hereafter as benefactors of this great national enterprise.

I respectfully submit to your consideration the following views:

1. The first object, before all others, is to extricate the company from every embarrassment, and extinguish the outstanding debts in their present situation. In doing so, care must be taken to provide ample protection and security for every dollar advanced by any one to this

end. This will necessarily require the entire and prompt action of all. The intrinsic value of the stock, at the present period, at a moderate estimate, is about two dollars and fifty cents per share, after paying off all the liabilities of the company hereinbefore referred to. Upon the completion of the road to the extent of fifty miles, the stock will be worth about eighty per cent., or \$4 upon the \$5 paid in. Upon the completion of the road to the extent of seventy-five miles, (which should be accomplished by the first of January, A. D., 1860,) the stock will be worth par. All of these calculations are made without reference to any estimate of the rights and franchises of the company, which are valued by reasonable men as worth millions of dollars. The indebtedness of the company, as I have stated, is about \$500,000. It does not exceed it. The amount actually needed for the time is for the payment of the debt of \$327,000, while at the present, independent of your rights and franchises, your actual property relieved of this indebtedness, is, at a fair estimate, worth not less than two millions of dollars.

I consider the following a nearly, if not quite, correct estimate of your means:

Unpaid assets due on stock, averaging \$2.30 per share	\$270,000
From this, however, about \$100,000 has been received and appropriated to the \$327,000 debts	
Bond and mortgage secured	380,000
Lands in Mississippi, not now saleable, but worth	15,000
Lands in Texas, depots, etc.	40,000
Twenty-five miles of road at \$30,000 per mile	750,000
250,000 acres of land granted by Texas, even as low as \$3 per acre	768,000
Due on unpaid stock	12,000
And on further unpaid subscriptions at New Orleans	50,000

[The latter includes the subscription of George S. Yerger, Esq., for self and friends, and others who refused to pay. To all of these no stock has been issued.]

Your entire debt, as I have stated, does not exceed \$500,000. I believe the fifty cent loan proposed, if generally carried out, may realize means whereby this immediate debt may be extinguished. If the sum of \$200,000 be raised by this company, I can so extricate your means, now tied up, as will complete the payment required. If, in your judgment, a doubt remains, it is sincerely trusted your interest, your energy and your united wisdom, will plan out and mature immediate means. If this amount be raised, and your property extricated from all embarrassment, the State loan granted you, upon the first and second sections of twenty-five miles each, will, it is believed, accomplish the completion of the next section of twenty-five miles of your road, giving the company fifty miles of road, and 572,000 acres of land. Had I, when I left Texas to come here, possessed the means for the extinguishment of this debt of \$327,000, I could easily have placed five hundred hands upon the further construction of the road, under an agreement to receive the State loan as pay thereof.

2. I recommend the immediate construction of fifty miles more of road, as soon as the \$327,000 debt is provided for. The munificence of Texas will afford sufficient means therefor, without imposing any further burthen upon us at present. It can be done within twelve months after you obtain possession of your road.

3. There is property belonging to your company, other than that granted by Texas. I recommend sale or disposition thereof, and the appropriation to existing necessities. All operations and investments, which do not go to construct the road, are held to be wrong in policy. But in so doing, I would caution you against any measure calculated hereafter unnecessarily to encumber the road and its franchises, as well as hasty or imprudent sales of lands granted you by the State of Texas. These are the proper basis for the construction of the road, and, if built, must add daily and vastly to the material and sale thereof.

4. I recommend a reduction of the stock to a grade equivalent to the actual value of the estate of the company. Be the same real, personal, or mixed, upon completion of fifty miles of the road. Here, let me remark, that much has been said of heretofore fraudulent issues of stock to an enormous extent. This has been the great catchword and pretense of our opponents. The facts, however, I state as I have received them.

The official reports of the company show that E. Post, Esq., in vindication of himself and associates in the New York office of the company, in December, 1857, demanded from the principal office in New Orleans, a thorough investigation of these charges. One examination was had, which lasted many days. The result is thus set forth in the report of your then President, Geo. S. Yerger, Esq., presented December, 1857, to, and unanimously adopted by, the directors and stockholders: "After a full investigation of a committee, there was a unanimous concurrence of opinion that no frauds had been committed."

The following also appears on record in your minute book, December 19, 1857: "Resolved, That the Board of Directors confirms the report of the investigating committee, and concurs in the opinion of said committee as therein expressed, that although errors of judgment may have been made by the executive committee in New York, no frauds have been committed in the issue of stock of this company." The directors there present were Geo. S. Yerger, President, Richard T. Archer, M. J. Hall, Edwin Post, A. M. Holbrook, C. S. Todd, T. Butler King, and W. S. Scott. Dr. J. Taylor, J. Pinckney Henderson, J. J. Persons and W. P. Sanders, were represented by proxy. Notwithstanding this, and apparently with a view to influence the public mind in Texas and elsewhere, and withdraw attention from the design they were carrying out against your interests, those wholesale charges were again and again reiterated by your opponents—even by some who had made the examination, and published the foregoing announcement to the world. Accordingly, your Board of Directors, in July, 1858, requested all stockholders to forward their certificates of stock in the office at Marshall, Texas, so that they also might examine into these allegations of fraud. If there be such fraud, it must exist in one or two modes, either by issuance of duplicate shares of stock certificates as numbered, or by issuance of certificates not entered on the books of the company.

In conformity with this request, a careful examination has been made of several hundred certificates, which have been handed in from all quarters of the Union. The result, so far, has been perfectly satisfactory, and, as yet, no trace of fraud is discoverable. As there is no power to compel the production of stock certificates, for the purpose of continuing this test, beyond the voluntary act of the stockholders themselves, it is the interest and duty of all to have their certificates scrutinized by the proper officers at Marshall. We urge this, as we consider it the interest, as well as the duty, of all parties to aid in the detection and exposure of fraud wherever it may be found to exist. This course will put to rest the imputations originating with the wicked, and perpetuated by the idle, the mischievous, or the ignorant. From everything thus far ascertained, the whole charge seems utterly groundless.

As the first step toward taking this ground of strength, I reiterate my recommendation that the stock be reduced to a grade commensurate with the actual value of the estate of the company in possession after the completion of the next section of 25 miles of the road.

To aid still further in giving tone and permanence and strength to the company, I would further respectfully suggest to your

consideration the propriety of opening books for a farther subscription of such reduced stock in the State of Texas. From what I have narrated, confidence has heretofore been wanting there. Your present action may inspire it. The solid and reflecting portion of the citizens of that State, those whose weight of character and social standing are the exponents of popular will, and chief support to all such enterprises, have refused heretofore to connect themselves with mere speculators, and place their property at their mercy. When, however, they see your united energy, promptness and good faith, gladly will they unite with you in this enterprise, so near and dear to them in their hearts and homes. They will strengthen the policy of the State in your favor, the munificence of which has been the object of speculation and wrong amongst some of your opponents. They will encourage immigration to your lands, and extend a hearty welcome to the stranger. They will render material aid, also, in constructing your road, and even by personal donations of land and services, in addition to the patriotic grants already afforded by Texas. From personal observation there, I am sanguine that the solid, substantial and paying men of that State, upon the adoption of a judicious policy, will take part with you to the extent of at least five hundred thousand dollars, and I am warranted in believing that large donations of lands will be made by individuals to the company, equal in value to your existing stock, when they see the energy of your present meeting. It is the value of your rights, in addition to your property, etc., that has prompted others wrongfully to endeavor to obtain them. Will you not protect them?

6. Experience demonstrates with unerring force that a radical change ought to be affected in our future management, and even our organization.

I have directed and forwarded letters to each successive president, my predecessors, requesting them to furnish all information as to every transaction of their respective administrations. Let each stand upon his own acts, and explain fully his own transactions and policy. So far as we have yet ascertained, all preceding reports are nearly correct, which have been given by this company to the public; whether wise or not, we leave each to explain, and the public to determine. This request, at the same time, will afford each the opportunity to reply to any charges which rumor or malevolence may have originated. Compliance, as yet, has not been made, nor has there as yet been sufficient time therefor.

You, gentlemen, have paid much money. You ask what has become of it! I answer, expended in originating and sustaining that part of your company, and much of it has been wasted by previous mismanagement. But here again, unjust censure may be, as it were, unconsciously directed.

In the commencement of new roads, where surveys are to be made through nations of savages and unfriendly territory, where supplies are difficult to obtain where an armed force is indispensable for protection, and your agents are working for you far from friends and home, expenditures must be greater than when afterwards others follow in their route are easily supplied. Take, for instance, the route of the Illinois Central road; before their construction of it had begun, their expenses amounted to \$2,600,000, or thereabouts. Ours through Indian tribes, only came to about \$3,100,000; yet the survey was of

much greater extent. One dollar then expended was of necessity of the importance that a few cents now could possibly be. Our situation now requires strict economy and watchful care.

In your present action, caution is urged upon you to select officers and agents capable, prompt and energetic, and, as far as possible, from the working men of the country. Their every effort of mind will be wanted. Their capacity and endurance will be indispensable. The previous difficulties of the company, to which I have alluded, clearly indicate the necessity of a radical change in its future management. I also believe that upon completion of the payments named in the compromise, you insure the termination of any difficulty between the State of Texas and your company, irrespective of any dependence upon legal rights. I have assurances from the people of Texas, of every position in society, even the highest in influence, that this result will be immediate. Before, however, this was ascertained, to guard your rights at every point, I caused to be prepared by eminent counsel their professional opinions, which (even at the worst) were in your favor.

Reflection would indicate some important results from what has been said.

1. There is a route from Memphis to El Paso, having privileges similar to, but not interfering with, our own. Common interest must and will, doubtless, concentrate all the benefits of each in our one great enterprise.

2. As I stated in my commencement, an inter-oceanic railway is the great measure of policy of our national government. To obtain military advantages, postal benefits, and the promotion of commerce, government must aid some route.

3. While it is true we can complete our route ourselves, government aid can greatly expedite its completion, and time is money.

Here let me call your attention to an important matter not generally considered:

The State of Louisiana has in process of construction her New Orleans and Opelousas route. To gain the Pacific trade, well might it prove the interest of that State alone to aid us with means to complete our enterprise without further assistance.

The State of Mississippi has equal interest in an equal contribution, by connecting the termini of their roads with ours.

The State of Tennessee is in the same position. Her direct interest in connecting inter-oceanic communication through her many routes to both North and South, could well compensate her for building our great main stem, without imposing on us the burthen of one cent.

So with Kentucky, Arkansas, Illinois, and Missouri. To canvass all these advantages would exceed our limits. Each State, for its own immediate and direct benefit, could well afford to build our road without cost to us, and independent of other resources from the national government, to which we believe we have a just right to look for other aid.

4. The inducements of government to aid us, simply call on us to show that hereby eight hundred miles is saved to them, which is not provided for in other routes. That by our late treaty with China, we can direct the trade of oriental regions over our path to Europe itself. That while Great Britain may endeavor to force a track through her territory of ice, snow, and mountains, from Canada to Van Couver, we have a genial climate and open way at all seasons.

5. The Mississippi river is, of natural con-

sequence, the great outlet of all commerce of the immense basin between the Rocky and Allegheny mountains. Through its immense length, beautiful and extensive cities have grown up, and their energetic inhabitants for local considerations, each demand an outlet, by railway, to the Pacific. We offer no impediment to others. We have undertaken one task to complete 800 miles of road where uninterrupted travel can be always maintained. It is not difficult to show their common interest with us in all uniting by branches with the great main stem we have commenced. The survey of the Iron Mountain road, shows a practicable route joining ours at Fulton, Arkansas. The southwest branch of the Pacific road of Missouri, is the present track of the overland mail to our very line of road. These open to us the iron and commerce of Missouri. These return to her the trade of Texas, the metals of Arizona, and the speediest communication with San Francisco. And so we may say of the routes from Cairo, Memphis, Ganes Landing, Vicksburg, and New Orleans. We advocate the policy of government aid to all these roads.

There will be business enough for all, and more than all can do. While then we seriously urge the fact that our Western and Southern States are interested respectively in such degree as to contribute generously to our enterprise, the aid mutually rendered by us to the national government, and by them to us is a mere matter of justice, resulting in speedier benefit to both.

Before concluding my remarks, I feel it due to call your attention to the noble patriotism, which, unsolicited, has induced the press of your country to advocate our great cause. I tender them my hearty thanks, and doubt not, that a responsive AMEN will thrill through your own hearts.

To insure concert, a respectful invitation has been addressed to our western cities and railroad companies to counsel and co-operate with us at this convention.

In conclusion, gentlemen, I ask you to take proper measures to co-operate with them and others, and bring to the attention of government everything connected herewith.

The epidemic prevented the assembling of any meeting at New Orleans, where from its proximity to our road, more personal examination might be had, and greater local interests be involved. In addition permit me to remark that our stockholders in that city have ever been foremost in generosity towards our enterprise, and glad would we have been to have visited them during the autumn, and before now.

All that remains, is for you now to commence an energetic course on most substantial basis. A new organization should be had. In electing officers I would suggest the selecting of men whose character and ability will prove a future guaranty of the success of the enterprise. Your hard work is not yet over. It has scarcely begun. The future will demand as much, if not more energy than the past. You will be obliged to have gentlemen of discretion on the very soil of Texas, to guard your interest at every point.

Heartily do I thank you, gentlemen, for the trust you have reposed in me in our late trying difficulties. I now surrender it to you again, conscious of effort to do right, and trusting in your approbation of what has so far been accomplished. If now you prove true to yourselves, you will have accomplished as great an enterprise as the world has enter-

tained. The eye of the whole nation is upon us.

The following gentlemen were appointed a committee to whom was referred the President's report, and other important papers and correspondence: Robert A. Richardson, Tennessee; W. G. Brownlow, Tenn.; Franklin Gorin, Kentucky; Jas. Shannon, Missouri; M. F. Creigler, Ohio; Lucius Desha, Kentucky; D. P. Henderson, Kentucky, and Jeremiah Morton, Virginia.

Mr. Morton stated that many certificates that had been sent to Marshall for examination had been delayed by the work of examination; that mail communication to Marshall was not as perfect as to some other parts of the Union; that the whole amount of stock issued was about sixty million dollars nominally, or really about three millions; that he would recommend the stockholders to take some action whereby it would be reduced to its actual cash representation.

Mr. E. Post remarked that if there had been any fraudulent stock issued in the last two years, it was he that had done it. Mr. Post here went into a lengthy elucidation of the manner of issuing stock. No such fraudulent stock had been issued; it was impossible.

The Convention then adjourned to meet at half past six o'clock this evening.

SATURDAY MORNING.

The meeting was called to order by the President, Hon. Jeremiah Morton.

Col. Post, of New York, begged to make a correction. He said that the morning papers had stated that he had appointed himself one of the committee.

R. B. Richardson, of Tennessee, chairman of the general committee, in offering the report, said: "The committee, in tendering this report to the convention, beg to state that they have diligently labored in the business which was intrusted to them; that they had not overlooked the prospects or hopes of the stockholders, but have given all our earnest attention, and have unanimously come to the conclusion to make the following report:"

REPORT OF THE COMMITTEE.

Your committee having examined the report of the President and accompanying documents, are satisfied that the rights of our stockholders will be secured upon the payment of \$327,000. The New Company will surrender our road and property into the hands of our stockholders; the State of Texas will dismiss the suit against us; and the work will be immediately prosecuted without embarrassment.

It is due not only to ourselves, but to the people of Texas, that our action should be prompt and decisive. They have shown the greatest liberality towards the work, and feel a deep interest in its progress. If we do not extricate ourselves from our present embarrassments, we can not expect their sympathy and aid will be extended to us any further; and we must make up our minds to endure the serious consequences that will follow. We submit, and recommend, the adoption of the following resolutions, and urge the

prompt and faithful carrying out of the same:

1. *Resolved*, That each holder of five per cent. stock is requested, and advised, to advance, as a loan, forthwith to the company, fifty cents on each share of his stock.

2. *Resolved*, That all persons loaning fifty cents, or more, to the company, shall be entitled to take the five per cent. paid stock of the company at its par value, at any time within twelve months from the date of such loan, and for the amount of such loan, with interest thereon: *Provided*, they may elect to do so.

3. *Resolved*, That in cases where stockholders prefer to donate to the company one half of the fully paid stock owned by them, it will be accepted by the company; and upon such donation and surrender of said stock, they will not be expected to make any loan on the stock of same character reclaimed by them.

4. *Resolved*, That the present exigencies of the company demand, and we hereby recommend, that all the stock on which installments are due the first day of January next, if not promptly paid, be sold by the company at the earliest day possible; and all sums not due, if not paid to the agents by the 20th day of December next, we recommend the immediate sale of the stock upon which said sums remain due, at New Orleans.

5. *Resolved*, That holders of stock, in this company, which has not been fully paid up, are earnestly requested to pay immediately the amount due upon said stock, and to advance now the installments payable on the 1st day of January next.

6. *Resolved*, That the President of this company be authorized and directed to sell the stock, which has been surrendered, and which may hereafter be surrendered, if necessary, to enable him to extricate the company from its present liabilities and difficulties, and if any of said stock be sold, to issue certificates of stock to the purchasers.

7. *Resolved*, That having full confidence in the energy, capabilities and discretion of the President of this Company, any, he be authorized to use any of the assets of the company now in possession of, or which may come into his possession, for the purpose of liquidating the indebtedness of this company.

8. *Resolved*, That the President of the Company is hereby requested and instructed to exercise all possible economy in the payment of officers or agents of this company, and that such expenses as may be unavoidably necessary shall be delayed from the installments received, and not from any loans, which may be made to relieve the company.

9. *Resolved*, That Edwin Post, of the City of New York, W. & H. Burkhardt, of the City of Louisville, Ky., M. F. Crigler, of the City of Cincinnati, John D. Rigland, of Petersburg, Va., W. G. Brownlow, of Knoxville, Tenn., S. W. Addison, of Nashville, Tenn., R. V. Richardson, of Memphis, Tenn., Col. A. D. Stewart and Col. Charles McClaurin, of St. Louis, A. M. Holbrook, New Orleans, Col. S. Deas, Mobile, Jay Cook, Philadelphia, Bowling Baker, Atlanta, Ga., Thomas H. Wiley, Treasurer, at Marshall, Texas, be, and are hereby appointed collecting agents of this company, to present the plans and objects adopted by this Convention to the Stockholders, and to receive and collect from them the loan and advance of money in these resolutions recommended; and also to collect all due and unpaid calls made upon each share of stock; and also to receive donations and surrenders of stock; and if a vacancy should occur in any one of said offices of collecting agents, the President of the Company shall fill the same by appointment; and the President of the Company may appoint agents at any other places he may think necessary.

10. *Resolved*, That persons living remote from where the authorized agents of this Company reside, named in the foregoing resolution, so as to make it difficult to arrange their payments in time for the meeting at New Orleans, are hereby requested to make their remittances directly to Thomas H. Wiley, Treasurer of the Company, at Marshall Texas, or to Jephtha Fowlkes, President, at Memphis, Tenn.

11. *Resolved*, That the agents herein appointed to receive a loan of fifty cents per share on the stock, be requested to pay over the amounts received by them, together with the due calls and such stock as may have been surrendered, to Dr. Jephtha Fowlkes, President, etc., on or before the 20th day of December next, in the city of New Orleans.

12. *Resolved*, That, in the opinion of this Convention, the reports of the issue of fraudulent stock originated with the enemies of the company, and were widely and mainly circulated by those who have conspired together and obtained illegal possession of your property: *And be it further Resolved*, That, judging from the reports of investigating committees, the report of the President, as now made to us, and other facts which have come to our knowledge, that we confidently believe no fraudulent stock exists; and that all fears or suspicions on this subject are entirely groundless.

13. *Resolved*, That a new election of officers, or a new organization of the Company, is at the present time inexpedient and injudicious, and that it will be, in the judgment of your committee, more judicious to adjourn the question of election to the meeting of stockholders at New Orleans.

14. *Resolved*, That we recommend, when this meeting of stockholders adjourn, it shall stand adjourned to the 20th day of December next, and then meet in the city of New Orleans, on which day the stockholders are earnestly requested to attend, or be represented by proxies in that city.

15. *Resolved*, That in the opinion of the Convention,

the construction of fifty miles more of the Road should be effected as rapidly as possible, with due regard to economy and the available means of the Company; and that the recommendation of the President, as to the grading of the stock, to the actual value of the assets of the Company, whether real, personal, or mixed, when the additional fifty miles are completed, meets the approbation of this Convention.

16. *Resolved*, That all local agents and trustees appointed heretofore by the stockholders, in various localities, are hereby requested and authorized to pay over all amounts of money received and collected by them to the regular agents of the Company appointed by this Convention; and this Convention tender their thanks to all gentlemen, who have acted as such agents and trustees, for their services.

17. *Resolved*, That the thanks of the Stockholders of the Southern Pacific Railroad Company are due to Dr. Jephtha Fowlkes, President of the Company, and are hereby tendered him, for the able, faithful and energetic efforts made by him, gratuitously, in behalf of our interests. And we feel it due to ourselves, and justice to Dr. Fowlkes, to express our unqualified confidence in his integrity and ability for the post which he now holds, as President; and we feel confident that he has the ability, with the co-operation of the Stockholders, to relieve the Company from its present embarrassed condition, and place it on a firm and substantial basis.

18. *Resolved*, That the thanks of the Stockholders are due, and are hereby tendered to Col. Chas. S. Todd, Vice President of the Company, for his personal sacrifices, in removing to Marshall, and accepting the Vice Presidency of the Company, when the interests of the Company were in jeopardy. It is a pleasure to express our confidence in his integrity and ability.

19. *Resolved*, That we tender the thanks of this Convention to Thomas H. Wiley, Treasurer and Superintendent, for his personal sacrifices and valuable services rendered the Company.

20. *Resolved*, That the warmest thanks of this Convention are due, and must respectfully be tendered, to these gentlemen in Texas, who, by their friendly aid and counsel, have assisted our President in bringing about a contemplated arrangement of our difficulties, and that we have entire confidence, that the great work which we propose to carry through their State will receive the encouragement of her statesmen, her capitalists and her whole population.

21. *Resolved*, That, whereas, answers have been received by the President of this Company, to a Circular addressed to Presidents of many different railroads and cities, approving of the general policy of uniting all interests in the prosecution of this great work; therefore,

22. *Resolved*, That the President of this Company be requested, at a suitable time and place, to call a general convention of all railroad men, and delegates from all cities interested in the success of our road, for the purpose of deliberating about our common interests.

Mr. Gorin moved the report be accepted.

The President, in explaining the report, said: It is optional with the stockholders to return one-half their stock or pay the fifty cent loan required by the present exigencies. But he spoke authoritatively, when he said that Dr. Fowlkes, who was one of the largest, if not the largest stockholder, intended paying the fifty cent call, and that he did not intend to return a single share. It is thought that by the 20th of December, one hundred thousand shares will be returned; this will increase the price of the stock retained, about sixteen and one third per cent., or decrease the stock one-sixth. The President begs, through me to say, that though he deprecates the large expenditures made, yet he must not, in his report, be understood as implying censure for the expenditures already made. All great and new enterprises have, and will be, liable to the same thing. The Illinois Central Railroad spent \$2,600,000 before the ground was broken. And with the three millions already spent in this road, we have obtained one of the finest charters ever given to a corporation; and made a survey, which the Government, with all their surveys, have traveled over for more than five hundred miles, for a mail route. We have built twenty-five miles of the road, and that it will, by the time of the New Orleans Convention, be worth \$260. I myself shall not say; so it might appear visionary. This is an enterprise which we all have an interest in, and it is, therefore, expected that each one of us should put our shoulder to the wheel, and give a helping hand. If there are any selfish stockholders who will

not, by paying the loan asked, still ~~ask~~ to enjoy the benefits accruing from such a loan, I hope this meeting will not countenance such men.

S. Haycraft, of ———, asked to know what had been done already in the case of the loans.

Mr. Burkhardt said, in answer to the gentleman: The stockholders in this city and throughout the State generally, have promptly paid the 50 cents, and they will all pay as soon as they are called on.

Mr. J. Monks said: I have the report of Mr. Lewis, trustee. The amount he received is nearly \$6,000. This is not as much as I expected. It is thought that \$600 more will be paid in to-day.

Mr. Morton, of Virginia, said: the receiver appointed by Virginia says, that the stockholders are ready and willing to pay up just as soon as this convention will say that it is necessary.

Rev. Mr. Dearing: Will the payments thus made, be sufficient to pay off the liabilities of the road?

The President in reply, said: Allowing for two hundred thousand shares to be surrendered, this will leave one hundred and fifty thousand dollars paid in by the loan. But for fear this will not be sufficient, the President of the company is empowered to sell the surrendered stock, and by allowing for the money which will be paid in to redeem the stock now forfeited, will increase the ready money of the company.

Mr. Gorin said: The President has been pleased to call me a calculator. I have made an estimation, and I place the stock at \$266. Mr. Fowlkes made an estimation too, and without knowing that another single soul had made another estimate, and he places the stock at \$266 50, within fifty cents of my calculation; and yet you may think we are wrong. Had I the money, I would give five million dollars for that charter, which the Lone Star has given us. Do you think the people of Texas will allow us to fight and pass through the chicanery of the law for years? They are attempting now to take it from us through their Governor and Attorney-General. But we have been saved by that meek-looking man sitting there (pointing to President Fowlkes)—that giant in intellect. [Applause.] A man sent by Heaven to bring us through these difficulties. [Immense applause.] No; we must all assist, or that great road, with untold wealth, will sink into the mire. Are any of you willing to go home and say we have thrown away the money you have spent—stock that you might have saved by so slight a sacrifice? I had not intended to make a speech this morning, when I came here. Our Chairman has made a report; on which report we have been working day and night since Thursday last. We come before you, as honest men, to tell you that this road can be saved. Our debts can, must, and will be paid.

R. B. Richardson. Sir, we have the most magnificent land grant that was ever given to a corporation. The plain and practicable question is, will you come forward and pay? Some are afraid that if they pay, others won't, and then they will lose their money. Let every man come forward and loan the fifty cents on his share; let every man pay what is due on the stock. When the world sees that you are determined to assist yourselves, the stock will go up. Can you expect anything from the people of Texas, who have

given you such a splendid charter, and you will not help yourselves?

I have been asked how the fifty cent loan can be returned. That money will be used only for the payment of liabilities, and if the money is not so used, it will be returned by the President to the persons who loaned the money.

Mr. Harney: You will all recollect that the road is not now in our possession—that it has been sold under a fraudulent deed of trust. But by arbitrament, it has been agreed that the money must be paid by the 15th of January. I say thus much for fear that you will be so much elated with the prospects, that you will forget to pay the fifty cents, and thus you will be robbed of your road, and your stock will not be worth one cent. And, gentlemen, unless the money is paid by the 15th of January your stock will be lost. As I said before, notwithstanding the splendid donation of land and the six thousand dollars, your road is lost. Mr. W. J. Grady, from Guilford, said he would take the whole surrendered stock at \$2 50; that's sensible.

[Mr. Shannon arose, but we were too distant to hear him.]

Mr. Burkhardt: I do not rise to make a speech, but only to suggest, that we should feel more satisfied if we could hear from President Fowlkes.

Dr. Fowlkes: In the report which I made, I could not go into the prospects for raising money. I have letters from stockholders from all parts of the United States, and with only one single exception, all appear to be willing to pay up the money required. But further, if the 200,000 shares will be surrendered, the residue will be at par. I believe I will be able, in the city of New Orleans, to raise money, between December 20 and January 15, sufficient to pay off all our indebtedness, and with \$50,000 I can make not a slight step towards freeing this Company. It is foolish, gentlemen, for one as old as I am, to talk of delay. I want to go to China before I die. When this money is raised, fifty miles can be built in one year; then you will have seventy-five miles. In seven years this road can be finished. I have told Texas, give us this chance, and if the stockholders do not pay this money by the time, I for one can not, and will not, longer hinder the State in her great and favorite enterprise. I have here the opinion of the attorneys, which says, though the executive sword is over your heads, still the people of Texas desire the road to be finished, and will assist and protect you.

Parson Brownlow being enthusiastically called, said:

Mr. President: If I were able to speak, and I am not; if I were anxious to speak, and I am not; if these stockholders and spectators were anxious to hear me, and they certainly are not, although they have called me up more as a compliment than anything else, there is nothing left for me to say, after the half dozen able gentlemen who have preceded me have covered the whole ground, and said, to better purpose than I could have said it, all that need be said. I would, however, have said a few things in regard to the President of this Company, but for two or three reasons. First, my friend, Col. Gorin, of this city, has paid him a merited and eloquent compliment; next, the President sits behind me, and as I am an exceedingly modest man, I can not praise a man to his face.

But, Mr. President, those who heard the

President's report read, will recollect that in the concluding paragraph he resigns his position, and surrenders the affairs of the company into your hands. It may have been supposed by some of you, that we, the members of the General Committee, would make some suggestions in reference to such a change. We have none to make. We are harmonious in our action, and to a man, we believe that Dr. Fowlkes is the man for the position he occupies, and the only man in all our ranks adapted to the position. I have seen newspaper editorials, and letter writers, opposed to the company, setting forth that "the notorious Jephth Fowlkes, of Tennessee," is the President of this company, meaning thereby to reflect upon his character. Why, sir, who have these calumniators not called notorious? They even called me "the notorious Parson Brownlow," when every body knows I am a retiring and a quiet, unpretending man. I know Dr. Fowlkes, and I have known him long. I am familiar with his career. He has been, for the last fifteen or twenty years, engaged in a praiseworthy, not to say good, religious work—he has been fighting rascals. We have differed only in this—he has lived down his enemies, lived them out of countenance, and is now at peace, while I have multiplied them every hour. There is this also to the credit of the Doctor, he has never had a quarrel with a man that he did not crush him out, and utterly exterminate him. The reason of his success has not been because of his piety, or his superior talents, though he is an able man—but because he had his quarrel just; because he was in the right, and his competitor in the wrong. And now, sir, he enjoys the confidence and esteem of all honorable, brave and patriotic men of Tennessee, irrespective of parties. He is regarded as an honest man, a patriotic and a generous man, and occupies a position that any man may be proud of. In politics, we are not together. He is a sort of universal, or national, or administration Democrat; but goes for his friends; and while I think him wrong in politics, I believe he is honest in his preferences.

But who did he encounter in Texas, when first sent out there as your chief officer? A band of plunderers, hired bullies, pensioned blackguards, native and imported vagabonds, and plunderers and pirates in high places. In going there, he was risking his life. This clan, claiming to be a new company, purchasing under the trust deed, boasted that several of their leaders had killed each his man; that they had committed murder, and were able and ready to do it again. Dr. Fowlkes and Edwin Post had no sooner arrived there, than they were notified that one of these conspirators would send a carriage to their boarding house, and that they must leave the State within a given time. The Doctor returned for a reply, which I endorse, all but one ugly word—"Tell the d—d scoundrel to come with it!" This was the last of that project to send these gentlemen off! But what next! On his return there this fall, he found that these graceless rascals had sent a bill before the grand jury to indict Fowlkes and Post for perjury, in filling a bill against them to defend your interests. But it was no go. There chanced to be some honest men on the grand jury, who would not be used by bad men. I have been indicted by grand juries more than once, who were instigated by thieves and conspirators; and I know how these schemes are managed. Indeed, I am getting to be a good

criminal lawyer, by defending myself against similar rascals.

But, Mr. President, I must tell these stockholders who compose this new company purchasing under the trust deed. Out of *twenty-three* of them, *eighteen* are men who have been associated with you—salaried officers and agents, contractors, etc., of the Company. These men are promising amendments to your charter by the Texas Legislature, with a view to execute or consummate their schemes under a trust deed so as to sell you out. Was ever such villianly perpetrated? And these are the men who have made their boasted discoveries of fraudulent stock at New York, and who have implicated such men as Edwin Post. It now turns out, gentlemen, that not a single share of fraudulent stock has been issued at New York. And instead of there being *millions of shares* out as charged by the enemies of the company, it turns out that there are only *six hundred and twenty thousand shares in existence*, and about *one hundred thousand* of these shares have been generously surrendered to the company here to-day, by these much abused New Yorkers, to aid the company; thus reducing the stock to *five hundred and twenty thousand shares*, and increasing the value of your stock and mine, *one-sixth* in value. It turns out, that all the stealing and villianly connected with this enterprise, has been in the South, and not at the North. Why, gentlemen, in a recent discussion with an abolition preacher at the North, upon the great slavery question, I told him that we of the South were indebted to the North for our negroes; they kidnapped them—exchanging brads, trinkets, and rum, for negroes, on the western coast of Africa; that their land and climate not being adapted to slave labor, they sold them to us in the South for the money! I plumed myself upon having cornered him, but, to my surprise, he came out and boasted that they had the energy and enterprise at the North to steal, while we at the South were too indolent! We have turned the tables on them now; we have the energy and enterprise at the South to steal out a great National railroad enterprise, while you (turning to Post) of the North, have been either too indolent or honest to steal! Gentlemen, it is a matter of surprise to me, that Col. Todd, Jeremiah Morton, Fowlkes, T. Butler King, Edwin Post, and others of you, associated with these rascals, had not turned out highway robbers by profession. With all my instinctive hatred of thieves, I confess, that if I had been associated with them as long as you were (turning to Todd and Fowlkes), I should have stolen every silver fork and spoon I could lay my hands on about a hotel!

But I must caution you against all that class of men in the country, who are now railing out against this enterprise. They are, in most instances, rascals, who have been dismissed from the service of the company, defaulters as agents, and swindlers as contractors and furnishers of supplies. Look at the cases of the notorious Wagoner and Sargent, of Cincinnati. These men, daily slandering this company, are indebted on the books, to the tune of *fifty thousand dollars*, for unpaid subscriptions and for money received and never paid over. These men paid over large shipments of *rotten fish*, and old discarded railroad cars and implements, not worth the freight paid on them by the company on their arrival at Texas. These are facts, known to gentlemen from Cincinnati, now under the sound of my shattered and feeble voice. But

we have friends, honest men, and capitalists, with us, in Cincinnati, and they are represented here.

But, Mr. President, I am compelled to close my remarks. Let stockholders come forward now and do their duty, and all is safe. You, who own full-paid stock, have only to loan the company fifty cents on the share and it will be returned to you in money or five per cent. stock, as you may. You that owe installments, pay them up, and no more is exacted of you. You see from the report of our committee, that none of this money will be used, unless it serves to free the company from all embarrassment, and restores to us property and franchises. We are on a ship enveloped in flames, and we can save it, if we will. If any of us refuse to lend a helping hand in this extremity, we deserve to be thrown overboard; and with the hull of a sinking vessel, go down—down to where, in the language of Pollock—

"Gravitation, shifting, turns the other way,"

and sends all on board to where Ward's ducks anchored!

On motion of Mr. Burkhard, it was

Resolved, That the thanks of this Convention are due, and are gratefully tendered to, the committee appointed under the report of President Fowlkes, for the patience and distinguished ability with which they have made their report.

Gen. Green offered the following resolution:

Resolved, That the Secretary be authorized to publish four thousand copies of the President's report, together with the proceedings of this Convention, in pamphlet form—the publication to be made as soon as possible.

On motion of Col. Todd, it was

Resolved, That the thanks of this Convention are tendered to Hon. J. Morton, for the ability and dignity with which he has presided over the deliberations of this Convention, and that our thanks are also due to the other officers of the Convention.

On motion, it was resolved to adjourn to meet in New Orleans on the 20th of December next.

NORTHERN PACIFIC RAILROAD—MOVEMENT IN CANADA.

We have heretofore given it as our opinion that the most feasible route for a railroad to the Pacific, lies partly through Minnesota and Dacotah, and partly through the British possessions. This route possesses the double advantage of easy grades, and of being adapted to a continuous line of settlement throughout its entire extent. Passing from St. Paul to the Red river of the North, over an unusually level country and from thence across to the Saskatchewan River, up the valley of which, by a gentle ascent to the foot of the Rocky Mountains, more than nine-tenths of the distance is accomplished without the intervention of any serious obstacle. From the head waters of the Saskatchewan, it is only two hundred miles across to Frazers River, along the valley of which a practicable route can doubtless be formed to Puget's Sound. For the whole distance the soil is arable, the climate quite as mild as that of Canada and the northern States of Europe, and water and fuel abundant.

Within a short time a movement has been initiated in Canada, and participated in by citizens of the United States, looking to the extension of the Canadian system of Railways along the western shore of Lake Huron, across the St. Mary's River, and so on to connect with the St. Paul and Pacific Road. These parties have presented a petition to the Canadian Parliament, asking the grant of a charter, by the name of *The Northern Pacific*

Railway Company, with authority to consolidate under one charter and into a single Company, all charters previously granted over or along any portion of the route, with full authority to construct and maintain a continuous line of Railway from the City of Montreal, by the way of Bytown and the valley of the Ottawa, to the Western Boundary of Canada; with the further right to construct and maintain for the use of such Railway, a bridge across the St. Mary's River at some practicable and convenient point, between the outlet of Lake Superior and Lake Huron, with the further right to enter into engagements with any other Railway Company or Companies in Canada or the United States, for connecting their respective lines, in such manner and on such terms as may be found most advantageous, and best calculated to accommodate the business of such railway and the public travel.

The chief difficulties in the way of this route lie in Canada, and immediately west of the St. Mary's River. When these are once fairly overcome, the route stretches away for nearly fifteen hundred miles through a country such as we have described above. Should the English government drive out the Hudson Bay Company, and organize Colonies in the valleys of the Red River, the Assiniboine and the Saskatchewan Rivers, and should English capitalists take hold of this railway scheme in earnest, it is impossible to overestimate the transforming effects that would speedily ensue throughout the entire habitable country to the Northwest of us.

To show that we are not alone in the high estimate which we place upon the country through which the projected railroad route lies, we copy the following extract from a speech delivered before the New York Chamber of Commerce, on Thursday last, by Hon. F. A. Conkling, of that city, on the occasion of celebrating the successful trial of steam upon the Erie Canal. Said Mr. Conkling:

"With the Valley of the Mississippi and St. Lawrence rivers, we have been accustomed to regard the area of the northern and central portions of our continent, available for agriculture, as exhausted. We limited our vision to the ground we stood upon. But no sooner have we filled up one grand division, than another opens before us. There is, in the heart of North America, a distinct subdivision, of which Lake Winnipeg may be regarded as the centre. This subdivision, like the Valley of the Mississippi, is distinguished for the fertility of its soil and for the extent and gentle slope of its great plains, watered by rivers of great extent, and admirably adapted for steam navigation. It has a climate not exceeding in severity that of many portions of Canada and the Eastern States. It will, in all respects, compare favorably with some of the most densely peopled portions of the Continent of Europe. In other words, it is admirably fitted to become the seat of a numerous, hardy, and prosperous community. It has an area equal to six or eight of our first class States. Its great river, the Saskatchewan, carries a navigable water line to the very base of the Rocky Mountains. It is not at all improbable that the valley of this river may yet offer the best route for a Railroad to the Pacific. The navigable waters of this great subdivision interlock with those of the Mississippi. The Red River of the North, in connection with Lake Winnipeg, into which it falls, forms a navigable water line

extending directly North and South, nearly 800 miles.

"The Red River is one of the best adapted to the use of steam in the world, having from twelve to fifteen feet of water for nearly its entire course some 450 miles. It waters one of the finest prairie regions on the Continent. Between the highest point at which it is navigable, and St. Paul, the head of navigation on the Mississippi, a railroad is in process of construction, sixty miles of which will be completed the coming year. The entire distance to be built is only 200 miles. When this road shall be completed, another grand division of the Continent will, as before stated, be open to settlement, in which communities will spring up with the rapidity which has marked the marvelous growth of our own country, possessing all the elements of prosperity, and of an extensive commerce. This commerce will be added to the abundant one we now receive from the West, if we welcome it with such facilities as will enable the grains and meats of the eastern slope of the Rocky Mountains, and the north shore of Lake Winnipeg to be set down upon our docks at such rates as will yield a good return to the producer, though transported more than two thousand miles. No continent can show a parallel, as none can show such stupendous works for the facilitation of commerce by a people 'in the gristle, and not yet ripened into the bone of manhood.'"—*Chicago Press*.

LOAN OF STATE CREDIT.

It has been suggested by a number of our citizens that a convention be called to choose ten delegates to attend a State Convention to be held at Iowa City, about the first of December next, to take into consideration the best, safest and most practicable plan of finishing our Land Grant Railroads. We notice that the different newspapers of the State are now speaking out about the proposed extension of State aid to Railroads. The expression of sentiments, as represented by those papers, is a feeling of distrust towards the proposition. Political feeling apparently has but little to do with positions taken, unless it is J. B. Dorr, of the Dubuque *Express and Herald*, and his opposition to it is bound to carry it, for we have not known Dorr's paper to succeed in any recent election. It is better calculated to cause dissensions, bickerings, and to distract the people than any other sheet in the West. Dorr might take to himself the credit of the large Democratic vote cast in Dubuque county, but when we come to inquire into the matter, we find that such men as the Hon. Ben. M. Samuels, Hon. Geo. W. Jones, Col. H. H. Heath, and a host of other good Democrats, whose gallant services both on and off the stump, were mainly instrumental in producing the gratifying result in that county. The fact is, that don't believe Dorr's opposition will amount to a hill of beans.

One thing we would suggest, and that is that many of our brethren of the press are acting rather hastily. In our opinion, and we give it for what it may be worth, no harm can arise from having the subject duly presented to the people, but as we understand it, no distinct, no definite plan has yet been proposed. Many are suggested, and as we see nothing in the way of the State resuming the lands she has denoted to the various companies, paying for them in her bonds of the amount of \$100 and upwards to the

amount of five or ten millions. Let these bonds bear interest until redeemed, and let them be receivable in payment for said lands from actual settlers only. By this process the State will insure her advances to any company from the receipts of the land which the settlement will make profitable and invaluable. So far for the land favored companies. For the other companies, whenever a neighborhood has graded and prepared the railroad bed, let the State endorse the bonds of the different counties, or rather, let the State give her bonds, receiving the County bonds in exchange. Let the Auditor of State certify, or register these State bonds for the State Banks, with this difference, that the parties banking on them may issue notes bearing interest, said notes being countersigned by the State Auditor. Each company can then issue its own paper, secured by the State and convertible at any time into State bonds of a larger amount. One fact is certain, as things now stand, that our various railroads, with all their lands, are unable to make headway. Meantime other States are advancing, and their prosperity is inviting immigration. It must inevitably result, in the course of things, that our people will become discouraged, and instead of adding to our numbers, we shall grow "smaller by degrees and beautifully less," unless early and energetic steps be taken by the State to put our railroad system upon a broad and successful basis. This, as has been shown by the communication of Platt Smith, Esq., in our last week's issue, can be done without putting the State or the people to any expense, and without in the least jeopardizing the public credit or the money of the State.

Under such an arrangement, Iowa would take the iron bit in her mouth, and move on with gigantic strides to the highest pitch of State and personal prosperity. Our entire system of roads would be completed in two or three years from the ratification of such a plan by the people. Our broad prairies, which now lie waste, would be made to teem with the richest harvests. Our interior towns and cities would throw off their garb of mourning, and put on the habiliments of a joyous prosperity,—and Iowa, our young and fertile State, instead of counting her people by hundreds of thousands, would soon count them by millions, and take her rank among the first States of this Union. This is no stretch of the imagination, but a faithful reflection of facts—facts that can not fail to arrest and fasten themselves upon every intelligent mind.

Our road, the I. C. A. L., is not the only road that has come to a dead halt, for the want of means to prosecute the work, but we believe it is the only road that shows up such a black list of frauds and petty speculations by its officers. But as this will soon be wiped out, and as the present imbecile Board already see the "hand writing on the wall," it is fair to presume that by a general repudiation of the black mail levied, the Central, with her legitimate indebtedness of only five or six hundred thousand dollars, for actual labor performed, will be on an equal, if not a better basis, than any land grant railroad in Iowa.

Looking at matters in this light—seeing that our railroads must stop unless held up by the State—and seeing that this assistance may be safely and promptly rendered without the slightest danger to the public credit, we can see no objection to the proposed "State aid to the Railroads"—on the contrary, we

perceive the strongest reasons in the world why that aid should be promptly given. Were it a proposition to involve the State in a monstrous debt, or make her a partner in the improvements, and thus add immensely to the taxes of the people, as some have seemed to understand it, we of course should oppose it with whatever power might be at our command. But when it is presented in the form of a plan which makes the State simply secure, adds nothing to the taxes of the people or the expenses of Government, and ensures the completion of our improvements, we think every citizen who wishes well to the State, and feels a pride in her good name and prosperity should give it his cordial approval.

Before closing, we would merely suggest to many of our contemporaries not to be so eager to condemn, and "go off" before they know what they are battling against. Better know in what shape the proposition is, before you array yourself against it. To fight it now, may be fighting nothing but a myth, a mere shadow, without any substance or vitality. The holding of a State Railroad Convention will do much good. Such a Convention can not help doing good, and hence we are warmly in favor of holding it—of bringing together citizens from the different counties of the State, for the purpose of consulting and counseling together in regard to the great Railroad interest of Iowa. Central and Western Iowa are peculiarly interested in this Convention, and the different counties should, and will, we trust, send up their best and strongest men. Men of all parties, creeds, and faiths, should be there—those in favor of State aid, and those opposed thereto—a free, frank expression of views and opinions should be made—and then the Convention will, perhaps, be able to present a plan for pushing forward the work upon our railroads.

When a definite plan, something plain and tangible, is presented to the people, then we can all take such positions as our judgments and convictions dictate. Let us have the Convention by all means, but State aid without taxation, a mere loan of State credit, we are most decidedly in favor of.—*Maquoketa Sentinel*.

SALE OF A RAILROAD IN NEW ENGLAND.—The *New London Star* states that the Amherst and Belchertown Railroad was sold on the 14th, the mortgage to the first bondholders having been foreclosed. There were two mortgages on the road, one on the rolling stock, &c., for \$25,000, and one on the road for \$60,000—making in all \$85,000. That on the road sold for \$30,000, and on the stock for \$12,500—making in all \$42,500. The road is 20 miles long, running from Palmer and Amherst, in continuation of the N. L. W. P. Railroad, and cost originally about \$225,000. It was purchased by the bondholders.

EXTENSION OF THE MINE HILL AND SCHUYLKILL HAVEN RAILROAD.—The spreading and prosperous company owning this road have decided to extend that prong of it which now terminates at Big Mine, to Centreville, a distance of about two miles, where new collieries are about to be opened. It is understood, also, that when the city of Philadelphia shall have leased the southernmost portion of the Girard coal lands, and the opening of collieries thereon are assured, the Mine Hill Company will extend a branch road up the Mahanoy Valley to or toward Girardville.

MONETARY AND COMMERCIAL.

During the past week large amounts of currency has been withdrawn by our pork men, rendering the money market considerably more stringent. The demand at present is greater than the receipts, hence the supply of currency on hand has greatly diminished. It is hardly fair to say, that the money market is *tight*, but we may make the same remark in reference to it that is often made in reference to a person who has imbibed a little too much of the ardent, that it is so-so, and that it would not be well to carry it much further. The truth is that we are blessed or cursed, as the case may be, with no real banking capital, and any little extra demand that is made on it, soon *overcomes* it. The reaction to be realized after the close of the pork business, we anticipate will take place much sooner this year than heretofore, less will be done on credit, money will change hands more rapidly, and it will soon return into the coffers of our general dealers, and money will be easier than before. There has also been considerable amounts of Eastern currency remitted for the purpose of being used in the purchase of the hog crop; if this had not been the case, the stringency would have been greater.

In Exchange we have no change to note. We quote New York at $\frac{1}{2}$ to $\frac{1}{4}$ prem. selling, and New Orleans $\frac{1}{4}$ to $\frac{1}{2}$ prem.

The City Council, last evening, resolved to assert the right of Cincinnati to first liens on the Cincinnati and Hillsborough, and Covington and Lexington Railroads. According to the terms of the original loans made to those Companies, the City was entitled to First Mortgage Bonds, but Stock security was subsequently taken in lieu thereof.

TO THE STOCKHOLDERS OF THE
SOUTHERN PACIFIC R. R. CO.

We, the undersigned, having been appointed a Committee to carry out the plan adopted by the recent meeting of Stockholders at Louisville, to relieve your Company from its present embarrassing and impending ruin, beg leave to call your immediate and earnest attention to the following facts:

By the terms of the Compromise effected with the so-called "New Company," it becomes necessary that the entire amount of our indebtedness to them be paid off *at once*!

To meet this payment it is required that each and every Stockholder comply with one of the three following propositions:

1st. Every holder of Stock not fully paid, must make immediate payment of the entire balance required to bring his Stock up to Five Dollars per Share.

2nd. Every holder of full paid Stock must advance as a loan to be returned with interest, the sum of Fifty Cents on each share of Stock so held.

3d. Any holder of full paid Stock, who prefers, may surrender one half his Stock to the Company, instead of loaning the Fifty Cents as above.

We deem it absolutely necessary that every Stockholder, who wishes to retain his interest in the Company and to share in its brilliant, and we trust soon to be realized, future, must make immediate response to this call, and pay over to either of the undersigned, on or before the Tenth day of December.

Every Stockholder, who fails to respond to this call by the time designated, *will most certainly lose his entire investment*; therefore we say to one and all attend to this matter NOW.

J. M. CONWELL, 65 and 67 West Front Street.
JOHN TAIT, 25 Walnut Street.

M. F. CRIGLER, s. w. cor. Pearl and Sycamore.
Committee.

Cincinnati, November 30, 1858.

Louisville, Ky., November 27th, 1858.

Messrs. CONWELL, TAIT & CRIGLER, Committee, etc.

GENTLEMEN:—We need the unanimity and united effort of all of our stockholders, and especially of those of Ohio. You know all the facts, the feeling and disposition of the Convention here, and I, by virtue of the authority given me by Stockholders and by Directors, etc., hereby fully empower you to do all and everything to meet the exigency, which must be met. Justice *full*—with the utmost liberality in our power shall be extended, to every stockholder, and those who act as recommended, can and will be protected I can not doubt. The views and the wishes of your stockholders shall and will be regarded and most fully met. Ohio is entitled to and will have a Director at our next election. Receive statements from all and every holder of Stock Certificates—as we desire that every Stockholder shall be secured to all and every right ever possessed.

Very respectfully,
JEPHIA FOWLER, President,
Southern Pacific R. R. Co.

TREASURER'S REPORT OF THE CENTRAL
SOUTHERN RAILROAD CO.

ASSETS.

Cash subscription.....	\$27,666 04
Construction.....	14,492 92
Real estate.....	690 00
Thomas Buford, Agent for State loan.....	299,300 00
Cash.....	770 28
	\$592,822 34

Local work construction—Amount per last report.....	\$5,725 68
Clearing, grading, and culvert masonry.....	114,008 65
Bridge masonry.....	17,266 31
Bridging.....	1,742 18
Cross-ties.....	817 50
Dodson's Gap, (includes all work done by company).....	8,964 75
Depot and station grounds.....	767 05
Right of Way.....	1,435 51
Engineering department.....	7,606 75
Contingencies.....	3,759 63
	241,084 11

Bond interest—Interest on Construction Bonds issued.....	1,552 38
Track and equipment expenses.....	279 45
	\$235,738 78

LIABILITIES.

Capital stock.....	\$471,698 42
State loan.....	\$291,000 00
Construction bonds.....	15,383 05
Bills payable.....	4,615 72
Contractors.....	39,844 99
	358,832 76

Tennessee and Alabama Railroad.....	5,000 00
Discount, interest, and exchange.....	197 60
	\$835,738 78

Receipts and Disbursements for the year ending October 31, 1858.

RECEIPTS.

Balance per last report.....	\$4,309 52
Subscriptions.....	\$22,835 97
Dis., interest and exchange.....	332 34
Bills payable.....	9,357 25
Bills receivable.....	416 85
Tennessee and Alabama Railroad.....	5,000 00
Right of way.....	62 50
	108,011 91
	\$112,221 43

DISBURSEMENTS.

Contractors.....	\$91,887 79
Right of Way.....	1,024 01
Depot and station grounds.....	917 05
Engineering department.....	7,349 15
Incidental expenses.....	2,857 17
Office expenses.....	100 00
Printing and advertising.....	149 10
Bills payable.....	6,870 80
Thomas Buford, Agent.....	300 00
	111,451 05
Balance.....	770 38
	\$112,221 43

BOARD OF DIRECTORS.

Thomas Buford, Thomas Martin, Benj. Carter, Thomas K. Gordon, Thomas M. Jones, Newton White, G. A. Reynolds, C. N. Ordway, C. P. Reed, T. A. Westmoreland, Giles County; R. B. Mayes, Wm. J. Dale, Wm. Galloway, Wm. S. Fleming, J. Ballanfant, Maury County.

OFFICERS.

Thomas Buford, Lynnville, Tenn., *President*; John Baird, Columbia, Tenn., *Sec. and Treasurer*; A. Anderson, Nashville, Tenn., *Chief Eng.*; D. J. Johns, Lynnville, Tenn., *Resident Engineer*.

ALLEN & NOYES'
METALLIC PACKING.
To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.
July 14, 1857. jy23-1m

DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,
Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16* JOSEPH DAVENPORT.

ENGINEERING!!

The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS, In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c. Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS, And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK.

Also, for Water Gauges, Indicators, Steam Whistles

CHAS. W. COPELAND,

Consulting Engineer,

Nev 64 Broadway, N. Y.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., *Civil Engineer*.

No. 298 H Street, Washington, D. C. april2

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RAILROAD GUIDE AND ROUTE-BOOK (established in 1850). The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated, No. 1.

CONTENTS.—Peter Funk Shops; Patent Safe Swindling; Pickpockets; Garroters; Gamblers, etc. etc.

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CONTENTS.—Lotteries, Gift Enterprises.

No. 3 Shows the Tricks of Seducers.

No. 4 In preparation, same subject as No. 3.

No. 5) Tricks and Traps of Horse Dealers.

No. 6) By "Frank Forister."

No. 7 On Courtship and Marriage. (in preparation.)

No. 8 and 9 Chicago and the West. (in preparation.)

Price, 10 cents each. Sent free by Mail.

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9 Spruce Street, New York.

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THIS ROAD, now open to Durand, eighty-five miles from Racine, and within eighteen miles of Freeport, forms, with its connections, the shortest, cheapest and most expeditious route from Racine, Milwaukee, and all parts of Southern Wisconsin, Northern Illinois and Iowa.

Two Passenger Trains daily each way, Sundays excepted,—connecting at Racine with trains on the Lake Shore Railroad for Chicago and Milwaukee; at Clinton with the Chicago, St. Paul & Fond du Lac Railroad for Chicago, Janesville, Madison and Prairie du Chien; at Beloit with the Galena & Chicago Union Railroad; and at Durand, by stage, for Freeport—there connecting with the Illinois Central Railroad West and South.

A Steamer leaves Racine for Chicago every evening.

Freight will have prompt dispatch over this road and can go directly to or from Milwaukee and Chicago without change of cars.

ROBERT HARRIS, Supl
Racine, May 15, 1857. my21

H. S. DURAND, President.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—

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BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY,
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9 A. M. and 11:00 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:25 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
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E. F. FULLER,
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Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Sup't Terre Haute & Richmond R. R.

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PATENT PORTABLE CIRCULAR S'W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatched Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Drills, Shingle Machines, &c.

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1,200 Kegs No. 1 Railroad Spikes, ½ by 9-16th.
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TRABER & AUBERY,
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ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

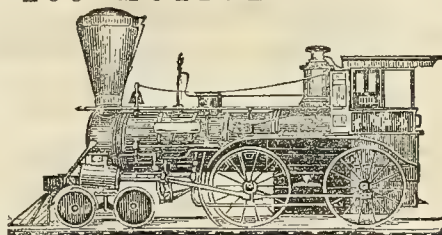
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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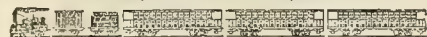
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Louisville, Vincennes, Evansville,
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Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

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To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

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MIDDLETON, STROBRIDGE & CO.,
Jan 8 1y 119 Walnut st., Odd Fellows' Building

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express.

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains east and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off.—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cresline for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:00 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 11:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

LANE & BODLEY,

MANUFACTURERS OF

Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boiling Machines, Scroll, Chair-back and Swing Saws, Concave Felloe Saws, Saw Mandrels, Turning Lathes, Dental Lathe Cutters, Lithograph and Tinture Presses.

No. 98 Pearl street, Cincinnati

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.
MACHINERY of the most approved construction for Flouring and Saw Mills.
GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.
STEAM BOILERS and WATER TANKS of any size or description.
SHAFTING, PULLEYS and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

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—AND—

Blank Book Manufacturers,
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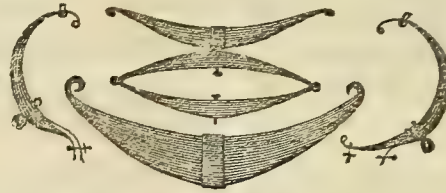
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Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—'y

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,..... DEC. 9, 1878.

Railroad Record

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THE ATLANTIC & GREAT WESTERN RAILROAD.—We learn that the Directors of the Atlantic and Great Western Railroad, met at Mansfield on Wednesday last, and organized as follows:

C. L. Ward, *President*; Marvin Kent, *Vice President*; E. P. Brainerd, *Treasurer*; J. M. Ward, *Secretary*; William Coolman, J. H. Chamberlain, Dr. Bushnell, Marvin Kint, *Executive Committee*.

The annual meeting of the Company was held in July last, but in consequence of the absence of Gen. Ward in Europe, and the negotiations pending, the new board did not qualify, awaiting his return.

Mr. Coolman, late Vice President, declined a re-election, consenting to serve on the Executive Committee, and Mr. Tyler, late Secretary, declined a re-election, having determined to adhere to his profession.

MINES AND MINING—SILVER—MEXICO.

It is quite remarkable, that America, and even the United States, combines mines of all the valuable minerals, except, perhaps, Sulphur. We believe this article comes almost exclusively from Naples. The great bulk of Tin comes from England; but tin has been found in New Hampshire. All other mines abound in this country—Gold, Silver, Copper, Lead, Quicksilver, Black Lead, Zinc, Iron, Coal, Slate, and Gypsum,—abound, and the most useful classes are found in illimitable quantities. It is only within a few years, however, that gold, copper, and silver have proved abundant. The copper and gold seem really unbounded; and if we may credit the accounts from Arizona, (and we have seen rich specimens of the ore,) there is abundance of silver in that region. Indeed, many tons have been sent to San Francisco, from the mines of Tubac. This brings us to consider the Silver Mines of Mexico, which have proved the most productive in the world, and are not yet exhausted.

Perhaps, one of the best evidences of what the Silver Mines of Mexico are, is the fact, that nearly all the rich families of Mexico—the Aristocracy—have derived their wealth from this source. In Mr. Ward's "Mexico," a full account is given of numerous families, who derived wealth and importance from this source.

The Mexican Mines were eagerly and wildly seized upon, by the English, and even by the people of the United States, as objects of speculation. But, this speculation ultimately became gambling, and the mining was badly and extravagantly managed.—Many of the stockholders were ruined, or disappointed, because the companies were not managed, as commercial enterprises, but merely as adventures. Many improvements were sought to be made; but the most useful were the modern machinery for voiding water from the shafts, and galleries.

The extraordinary abundance of silver, once in these mines, is thus noticed by Humboldt:

"Whenever these superb countries which are so greatly favored by nature," says Humboldt, in his essay on gold and silver, in the *Journal des Economistes*, "shall enjoy perfect peace after their deep and prolonged internal agitations, new metallic deposits will necessarily be opened and developed. In what region of the globe, except America, can be cited such abundant examples of wealth, in silver? Let it not be forgotten that near Sombrete, where mines were opened as far back as 1555, the family of Fagoaga, — Marquesses de Apartado, — derived, in the short space of five months, from a front of one hundred and two feet in the outcropping of a silver mine, a net profit of \$4,000,000; while in the mining district of

Catorce, in the space of two years and a half, between 1781 and the end of 1783, an ecclesiastic, named Juan Flores, gained \$3,500,000, on ground full of chloride of silver and of colorados!"

The question arises at this point—whether this abundance continues? Are the Silver Mines of Mexico exhausted? Or even diminished in their supplies? Naturally, we should say all reasons were against such a supposition.

There is no evidence that silver is a mere product of the *surface*, any more than sandstone. It must have an origin—a source; where is it? Is it embedded in rocks? or, embosomed in the earth?

On the present state of the mines we shall quote some facts, referred to by Brantz Mayer, in his history of Mexico. During the peaceful epoch of the Spanish Domination, Baron Humboldt calculates the annual value of the Mines of Mexico, at not more than \$23,000,000, or nearly 1,184,000 pounds avoirdupois of silver, and 3,500 pounds avoirdupois of gold. From 1690 to 1803, \$1,330,772.093 were coined in the *only* mint of Mexico; which is about \$12,500,000 per annum. From the discovery of New Spain, till its independence, about \$2,028,000,000, or two-fifths of all the precious metals which the New World has supplied during the same period, were furnished by Mexico alone.

On these facts, Mr. Mayer says the idea of exhaustion in the mines of Mexico, is contradicted. The Mint of Zacatecas alone, during the Revolutionary period—from 1811 to 1833—reached more than \$66,332,766, and in the eleven last years of that period from four to five millions per annum. The general metallic production, says Mr. Mayer, has risen refreshed from its slumber, so that, according to the best accounts, it has ascended to perhaps twenty millions annually in total production, in consequence of the prolific yield of the workings at Tremillo, Chihuahua, and Sonora.

Mr. Ward says, that in the low country of Sonora and Linaloa, almost every place, designated as a town or village, was originally a Real, or district for mines.

In the nine years from 1835 to 1844, the Silver Mines of Mexico yielded \$231,267,354, which makes \$13,126,735 per annum.

The provinces from which the largest amounts of silver is derived, may be seen from the following statement of coinage in 1844:

Guanajuato.....	\$4,661,708
Zacatecas.....	4,429,353
Mexico.....	1,724,328
Guadalajara.....	955,315
San Louis Potosi.....	956,535
Guadalupe Calvo.....	433,126
Chihuahua.....	351,632
Durango.....	240,870

In the year 1849, the production was yet greater, and at the present time is supposed to be still further increased. It will be observed, that the new and increasing mines

are on the North side of Mexico. These, too, are comparatively unsettled. We infer from this, that there is yet an extensive region of Silver Mines, which will be developed in future, and reward the enterprise of prudent adventurers.

FUTURE RAILROAD CONSTRUCTION.

The following paragraph, taken from an English Journal, we find in the *Railway Times*. It agrees so well with what we have continually advanced on this subject, that we give it in evidence of our own correctness. It is all a mistake to suppose, that because railroads have been depressed for a year or two past, that, therefore, there is to be a stop to their construction! The world wants four-fold the miles of railroad it now has, and the United States wants double as many as there are now, and that too soon.

It will be seen, the London Engineer estimates ten thousand miles of new road for the United States, at an early day; five thousand miles this side the Mississippi, and five thousand beyond it. This is a moderate estimate. It is seen, that a line looked upon, as of prime importance, is the line from New York west through Pennsylvania. There is no doubt of this; and it is this fact which gives importance to the "Great Western" line, which is so much opposed and ridiculed. It is, perhaps, not the most direct; but it is certainly much more so than the circumbentibus now formed.

We insert only that part of the article which relates to England, the United States, and Canada:

"What has been done in Great Britain in railway construction must in time be done also for a great part of the world. If the two hundred millions of square miles of the earth's surface were to be traversed by railways to but the one-hundredth part of their proportionate extent in this kingdom, where there is one mile of railway for every thirteen square miles of area, the total extent of railways would be more than a 150,000 miles. At present, there are hardly 50,000 miles of railway in the world—there being 26,000 miles in the United States of America, 9,500 miles in Great Britain, about 4,500 miles in France, and perhaps 10,000 miles in all other countries together. The enormous system of American railways consists mostly of single lines of cheap construction, and their total earnings are no greater in a given time than those of the railways of this country. The English railway system, which is generally considered as completed, is being constantly, although gradually extended. There are acts in existence at this moment for the construction of more than 4,800 miles of new lines, although some 2,600 miles of this amount, from the lapse of the powers granted by Parliament will never be undertaken, unless under renewed charters.

We are to look principally, however, to foreign countries for the future extension of

railways. Although these may present no such gigantic instances of progress as have been witnessed in England, the aggregate railway construction of the world will doubtless go on—no one can say for how long—at the rate of several thousands of miles yearly.

In the United States, always the greatest seat of foreign railway operations, a considerable extension is contemplated. Throughout the country various connecting lines are required to complete the present system. Some of these will open up through routes of great importance, such as that contemplated from New York due west through Pennsylvania. Probably quite 4,000 miles of these connecting lines are still required. West of the Mississippi river and in Texas, from 4,000 to 5,000 miles of railway are projected with the view of early construction. This is exclusive of a railway to the Pacific, the prospect of which is quite uncertain for some years, unless the production of gold in British Columbia should encourage the undertaking of a continental line through British America. Such a line would be two thousand miles in length.

In Canada, railway enterprise has proved extremely unprofitable, excepting the Great Western line, which has the advantage of a large traffic between the States. The Grand Trunk Company will soon complete its great line of 1,126 miles, about 900 miles being already in use. The completion of the Victoria Bridge, at Montreal, and the connection at other points of the divided portion of the Grand Trunk, will naturally add greatly to its resources, while the growth of the country, to which so strong a tide of British emigration is moving, will, in a few years, furnish it with an immense traffic. In the event of the construction of a continental line to the Pacific, the Grand Trunk would form its great eastern section of more than 1000 miles. Other railways are progressing slowly, and with very moderate encouragement, in Canada.

WHAT IS THE VALUE OF MONEY, OR THE TRUE RATE OF INTEREST?

This question is an important one, and we have the means of answering it.

There are two things always compounded together, however, which must be separated before we can arrive at the true result. These are the *security* and the *rent*. When there is the least shadow of doubt, on the security offered, there is just so much added on to the *rent*, by way of Insurance. In such places as London, or New York, this is so well understood, that almost any note in the world can be discounted, but there is just so much added on. For example, the notes of a young spend-thrift heir may be discounted, although he is not in possession of his property. For, the presumption is, that his ancestor will die before him, and the Usurer will discount his bill at 25 per cent., on his expectations.

There is another element to be taken into view. This is *time*. If the security be deemed perfect, then the capitalist will give more for it, on *long* time, as the Bonds of Government. On the other hand, if it be merely the note of an individual, the money lender will discount cheaper on *short* time;

for it diminishes his risk, and he turns his money oftener.

Now, to test the value of money, the Bonds of the United States Government are deemed the best security, on earth. Let us see the quotations. The United States Sixes of 1867, bring 115. Reducing this to par, the rate of interest is 5.3 per cent.; and this is at this moment, the true value of money in the United States. Money is loaned at less than this in New York,—payable *on demand*. The capitalist does not get as high as this; for, he is every where subject to taxes on his property. These taxes are, in most States, nearly equal to one per cent.

The quotations of the value of money made in the columns of newspapers are just, as to most transactions of commerce, but they are not just in regard to the real value of money. In most parts of the United States, money is quoted at ten to twelve per cent., and merchants generally pay that amount; but, even on Mortgage money may be had for less than that; and it is questionable whether in commerce generally, it is worth more than six per cent.

CORRESPONDENCE.

Editors of Railroad Record:

You recently gave the history of the Railroad, and the history of the Steam Engine; before the time passes by, I desire to give you the history of the Ohio Gauge of Railroads, to which I am now specially prompted by the following incident. I was recently present at a meeting of gentlemen, connected with the Atlantic and Great Western Railroad,—the middle portion of the New York and St. Louis Railroad, broad gauge,—when a distinguished railroad contractor while addressing the meeting, spoke of the unfortunate choice of gauge of railroads in Ohio, as having been a loss of many millions of dollars to the people, in the break of gauge between Ohio and the adjoining States. He very pleasantly added, that this diversity happened in this way: The Mad River and Lake Erie Railroad Company was the first Company in Ohio, which undertook to lay down a track; after they had procured their iron, which was a flat bar, but before any track was laid, an agent of the company, while in New York, bought a second hand engine which had been built for a Georgia Road, and as that engine had a gauge of four feet ten inches, the agent wrote home to have the track laid of that width, and so the roads of Ohio came to have a gauge different from Pennsylvania, Indiana, and Michigan.

I had heard the story before, and had once read it in a Dayton paper, as given on the authority of a late President of the Company. And on the occasion now referred to, it was so pleasantly received as a matter of railroad history, that one might be loth to disturb it,

but, having been called on by a gentleman present, to give the early times of railroads in Ohio, I was compelled to spoil the story and pronounce it a fancy sketch.

The guage was fixed by myself and of very deliberate purpose, in the following manner: In December, 1835, the Directors of the Mad River and Lake Erie Railroad Company, on the faith of a subscription to the stock from Buffalo, had ordered eight hundred tons of flat bars from England, through Davis & Brooks, of New York. In July, 1836, I was deputed as Treasurer of the Company to proceed to New York, associated with Mr. Oran Jollett, of Sandusky, to encounter the hard task of raising money to meet the charges on the iron, and to send the rails forward to Ohio. We succeeded in the object of our mission, but in doing so, I incurred a large personal liability, which seemed to create a necessity for my accepting the office of President, in addition to the office of Treasurer. Being specially charged in this double capacity with building the road, and bringing it into use, I sought at once to determine the width of guage. The New York and Erie Railroad had then been created, and was the only road authorized to be connected with Lake Erie, and at the same time authorized to carry freight. I assumed as certain, what was then reckoned visionary, that a railroad would be made along the Lake shore, from Sandusky to Dunkirk, and concluded it was desirable to have one uniform guage, from Sandusky to New York. Accordingly, I wrote from my place in the Senate of Ohio, to James G. King, President of the New York and Erie Railroad, to know the guage adopted for that road, with a view to adopting the same guage for the Mad River and Lake Erie. I received the following reply:

OFFICE OF N. Y. & ERIE R. R. Co.,
New York, 27th Feb., 1837. }

JOHN H. JAMES, Esq.,

Pres. M. R. R. Co., Columbus :

Your favor of the 14th inst., was duly received, and in reply, I beg to state, that the subject of the width of our track is now engaging attention, and must ere long be decided upon. When this takes place, you shall be apprised. Mean while I annex a statement of the different width of tracks now in use.

I am, dear sir, truly yours,

JAMES G. KING, Pres't.

A.—Track 4 feet 9 inches :

Mohawk and Hudson ; Utica and Schenectady ; Auburn and Syracuse ; Carbondale.

B.—Track 4 feet 8½ inches ;

Ithaca and Owego ; Boston and Providence ; Baltimore and Ohio ; Columbia and Alleghany.

C.—Track 4 feet 10 inches :

Jersey City to Newark and Brunswick ; Camden and Amboy.

D.—Track 4 feet 9 7-8 inches :

Patterson and Hudson.

E.—Track 5 feet :

Charleston and Augusta.

F.—Track 5 feet 6 inches :

New Orleans and Nashville.

Not having the benefit of a previous decision by that Company, and being unable to wait, I was next to decide, from the information before me, what guage should be adopted. The Manchester guage of 4 feet 8½ inches, which had been adopted on the Baltimore and Ohio Railroad, by the engineers who visited England to procure information, had also been adopted on the Boston and Providence Road by Gen. McNeill, one of the Baltimore engineers. But westward of New York, a wider guage was in use, varying from four feet nine inches to four feet ten inches ; and as both the roads from Jersey City had substantially the latter guage, I thought it probable that the New York and Erie would finally conform to that, and so I adopted that width for the Sandusky Road.

In the preceding Summer I had formed the acquaintance of Mr. Grosvener, of the firm of Rogers, Ketchum & Grosvener, of Patterson, N. J., who informed me that they were about to commence the building of Locomotive Engines, and would be glad to have an order from our Company. I gave an order for two engines, with the guage undetermined, and early in 1837, I wrote to them that the guage was fixed at four feet ten inches, and to call the first engine—SANDUSKY. That engine was completed and sent over the Patterson Road to New York, the same season and shipped to Ohio. It was the first engine built by Rogers, Ketchum & Grosvener, and the first engine brought to Ohio. It was soon followed by the Wyandot and the Seneca from the same works.

You will thus see that the Ohio guage was not the result of any accident in buying a second hand engine, and if it was ill chosen, the fault is mine. But I am not aware of any evil that results from it. All the attempts to introduce the Manchester guage into Ohio, except one, have been abandoned, and the tracks changed to the standard width. The Ohio guage has also been extended from Cleveland to Buffalo ; from various points in Ohio to Pittsburg ; from Pittsburg to Chicago, and to Indianapolis, and gradually other roads in Indiana will change their gauges so as to conform to the Ohio roads.

Yours, respectfully,

JOHN H. JAMES.

URBANA, OHIO, Dec. 6, 1858.

☞ The Pittsburg, Fort Wayne and Chicago R. R. Co. has finished the laying of its track from Laporte to Chicago, and it is now operated independently of the Southern Michigan.

OHIO AND MISSISSIPPI RAILROAD.

Pursuant to notice a meeting of the stockholders of the Ohio and Mississippi Railroad Company, was held at the office of the corporation in this city December 1st. There was a fair attendance, including many of the largest stockholders. On motion of Joseph Torrence, Esq., Larz Anderson, Esq., was appointed chairman; Samuel Trevor was appointed secretary.

The first business in order being a report from the Committee on Compromise, appointed at the last annual meeting of stockholders, Prof. O. M. Mitchell submitted a copy of the contract between the Committee and the Associates, heretofore published in the *Record*. On motion, the action of the Committee was unanimously approved.

On motion, the thanks of the meeting were returned to the Committee, for their industry and efficiency in carrying out the views of the stockholders.

Mr. James C. Hall offered a resolution, authorizing the Company's Executive Committee to make such appropriation as may be deemed necessary, to compensate the members of the Committee of Investigation and Compromise for their services. Adopted unanimously.

Mr. James C. Hall, read a preamble and resolutions, adopted by the Board of Directors at a meeting on the 4th of November, together with an exhibit of the financial condition of the Company, as follows :

PREAMBLE AND RESOLUTION, ADOPTED NOV. 4, 1858.
OFFICE OF OHIO & MISSISSIPPI R. R. CO.

WHEREAS, The Company has been unable to pay the coupons for interest, which have recently become due on its mortgage bonds, which past due interest may be stated as follows:

Coupons on \$2,050,000 first mortgage bonds, due July 1, 1858.....	\$71,750 00
Coupons on \$258,000 second mortgage bonds, estimated.....	45,150 00
Coupons on \$422,000 construction bonds, due March 1 and Sept. 1, '58.....	296,940 00
Coupons on \$3,320,000 income bonds, due May 1 and Nov. 1, '58.....	232,400 00
	\$616,240 00

AND WHEREAS, In addition to this accumulation of interest, there exists heavy liabilities to the city of Cincinnati, and a floating debt of about \$530,000:

AND WHEREAS, The requirements of the Road, essential to its own improvement and permanency, will exhaust the entire net earnings for several months to come, rendering a further accumulation of interest unavoidable.

AND WHEREAS, It is highly desirable that the indebtedness of the Company should be capitalized or otherwise arranged, so that the Company may be effectually relieved from the payment, hereafter, of so large an amount of interest as is now accumulating:

AND WHEREAS, The Capital Stock of the Company is now too large to admit of such an increase, as will be sufficient for the purpose of such capitalization, without creating a capital stock which would bear an undue proportion to the fair value of the road and appurtenances, and which would therefore have but a nominal value per share, therefore,

Resolved, That the Directors earnestly recommend to the stockholders, the adoption of some general and comprehensive scheme for the reduction of the present bonded and stock capital of this Company, and for the adjustment of its other liabilities, and the immediate appointment of a committee on the part of the stockholders, at a general meeting to be called for that purpose, to whom full powers to carry out a proper plan shall be given, and that the President be directed to call such meeting at such time and place as he may deem proper.

STATEMENT OF THE BONDED AND FLOATING DEBT, AND THE CAPITAL STOCK OF THE OHIO AND MISSISSIPPI RAILROAD COMPANY TO JANUARY 1, 1859.

First Mortgage Bonds and interest	\$2,193,500
Old 2d do. do. do.	316,995
Construction do. do.	4,637,920
Income do. do.	3,591,185

Total Bonded Debt.....\$10,729,500

Old Floating Debt and interest.....	140,000
Due Contractors, Messrs. Aspinwall & Associates and interest.....	368,400
Capital Stock of the Company.....	6,300,000
City of Cincinnati—Capital Stock, for which is held \$1,000,000 in Stock as Collateral....	600,000
Total.....	\$18,148,000

Annual Interest on Bonded Debt at 7 per cent.....	\$690,900
Annual Interest on Floating Debt at 6 per cent.....	30,550
Interest on City Debt, after 1861, at 6 per cent.....	36,000
Interest on over due Coupons, \$870,000 at 7 per cent.....	60,000
Total Annual Interest.....	\$818,300

The following preamble and resolutions, prepared by the Board of Directors, were then offered for the approval of the meeting:

WHEREAS, In the communication just Read from the Directors to the Stockholders of the Ohio and Mississippi Railroad Company, it is represented that the Company is now laboring under a large accumulation of interest on its bonded debt, and that the necessary improvement of the Road will require all of its revenue for several months to come, rendering a further accumulation of interest unavoidable. And, Whereas, It is apparent to the Stockholders that the Company can not long maintain itself under this large and rapidly increasing debt, and must have permanent relief by a substantial reduction of its bonded liabilities:

Therefore, Resolved, 1st. That the aggregate of the Stock and Bonded liabilities of the Ohio and Mississippi Railroad Company, greatly exceeds the value of its property and franchises, and that a plan should be adopted for the reduction on some equitable basis of such liabilities to an amount corresponding to such value.

Resolved, 2. That before the Ohio and Mississippi Railroad will fully realise all the benefits due from its location and importance as a great national highway between the two great cities of the West, it is of vital importance that in its road bed, equipments, and structures, it should be put and maintained in perfect condition, and that in any scheme which may be adopted, this important object should be constantly kept in view.

Resolved, 3. That the various parties in interest, viz:

The Bondholders,
The Floating Debt Creditors,
The City of Cincinnati,

be each requested to appoint a Committee to represent their respective interests, to meet a Committee of Stockholders, with authority to consummate some arrangement for the reduction of the Bonded debt and Stock Capital of the Company, and for the adjustment of its other liabilities.

Resolved, 4. That be a Committee on the part of the Stockholders, who are hereby empowered to agree to some general and comprehensive plan that shall equitably protect the various interests, and at the same time effectually relieve the Company from the heavy burthen of debt which is now crushing out its energies and destroying its usefulness.

Resolved, 5. That the Stockholders freely commit their interests to the Committee so appointed, with full confidence in the adoption of some plan that while it will fairly protect their interests, will, at the same time, be just and equitable to those of others.

Resolved, 6. That all the Stockholders of the Company be recommended to unite with those here present in the execution of an authority to the Committee above named, in the form herewith submitted, authorizing them to bind the subscribers respectively, by any plan of adjustment which they may adopt for the reduction of the Stock Capital and liabilities of the Company.

The resolutions were taken up *seriatim*, and adopted without a dissenting voice.

On motion of Mr. S. C. Parkhurst, the chair was authorized to fill the blank in the fourth resolution, by the appointment of a Committee of five.

The Chair then announced the following Committee: V. Worthington, James C. Hall, J. D. Lehmer, John Ross, and Y. L. M. Barlow.

On motion, the Chairman of the meeting was added to the Committee.

Mr. Anderson then read a power of Attorney for the signature of stockholders, giving the committee full authority to carry out the

object of the resolutions. This document, which was numerously signed on the spot, it was announced, would be left with Mr. Trevor, Secretary of the Company, for the signature of stockholders.

On motion of Mr. Kirk, the proceedings of the meeting were ordered to be published in the daily papers, and also in pamphlet form, with the power of attorney attached, for signatures.

The meeting then adjourned.

THE AWARD OF THE ARBITRATORS FOR THE ADJUSTMENT OF THE DIFFICULTIES BETWEEN THE OLD AND NEW SOUTHERN PACIFIC RAILROAD COMPANIES.

WHEREAS, Jephtha Fowlkes, President of the Southern Pacific Railroad Company, chartered by the State of Texas, in behalf of the Directors, and the Stockholders of said Company, being fully authorized thereto, has submitted to L. P. Grant, President of the Southern Pacific Railroad Company, organized under the act of the Legislature of the State of Texas, approved the 19th of December, 1857, certain points of difference between their respective organizations, to the undersigned for final adjustment, determination and award. Each party, as aforesaid, in behalf of their respective organizations as aforesaid, being fully authorized and empowered to act in the premises, and each in behalf of his respective company or organization as aforesaid, having entered into a bond to the other in the sum of five hundred thousand dollars, conditioned to abide their own agreement, and the award of the undersigned, or a majority of the same in the premises.

AND WHEREAS, The party of the first part has proposed to the party of the second part, that all *bona fide* debts against the Company in the hands of the New Company shall be paid off, one-fourth in three months, one-fourth in five months, one-fourth in seven months, and the remainder in nine months, in cash, or with such negotiable paper as shall be good and approved by a majority of the Committee.

To pay the money demand held against the Company, and merged in the stock of the Company, to receive and take as payment be made a transfer of the stock with the debt.

AND WHEREAS, The party of the second part agree that the *bona fide* stockholders of the "sold out Company" may be permitted to pay all the debts recognized and contracted by the said Southern Pacific Railroad Company, provided the same shall be paid by the expiration of three months. And the party of the second part, in consideration of such payment, agree that all the stock held by the corporators of said Company, representing said debts, shall at the time of said payment, in full, be transferred to the *bona fide* stockholders.

AND WHEREAS, Both parties agree that the undersigned shall settle and determine who are *bona fide* stockholders.

Now, therefore, touching the points of difference in the foregoing propositions between the parties, the undersigned award and determine that the said party of the first part shall pay and satisfy in cash or good negotiable paper, to be approved by the undersigned, all the *bona fide* debts held by the party of the second part, merged in or represented by their stock in three equal payments, at in-

tervals of three, five, and seven month from this date.

It is further awarded and determined, That on the final payment as aforesaid, the said party of the second part shall assign and deliver over to said parties of the first part, as may be determined to be *bona fide* stockholders in the Company of the party first aforesaid, all the stock in the Company of the second part, representing the debts originally due from the party of the first part, and converted into stock in the Company of the party of the second part, as aforesaid.

The party of the second part proposes that on executing the agreement proposed for payment and transfer of stock as aforesaid, that the party of the first part dismiss a certain suit now pending in the District Court of Harrison county, Texas, wherein S. P. R. R. Company are plaintiffs, and J. M. Saunders and others, defendants. The party of the first part agrees that the undersigned shall be invested with full powers to direct the institution on dismissal of suits between the two Companies, and against others, jointly or severally, and make such orders and requirements from time to time as it may deem best to further the objects of the agreement.

It is therefore awarded and determined, Touching the matters last aforesaid, that if the party of the first part shall make default in their said several payments, as herein before awarded to be paid, or any one thereof, then and in that case the said suit shall stand dismissed at his cost, and all the rights claimed by the parties therein shall be and remain forfeited, and henceforth of no avail whatever.

It is further awarded and determined, That should the party of the first part make default and forfeit as last aforesaid, that then and in that case the said party of the second part shall succeed to all their rights and privileges. And the undersigned, regarding the assets or property of such a corporation as a trust estate, equitably liable in whatsoever hand it may be for all the just and *bona fide* debts created for its benefit, alike without discrimination, doth award and determine that in case of a forfeiture of the rights of the parties of the first as aforesaid, then and in that case the said party of the second shall pay and satisfy all the just and *bona fide* debts of right due and owing on account of said Southern Pacific Railroad Company, in three equal payments, at three, five and seven months from such forfeiture, such debts to be examined and approved by the undersigned.

The undersigned being fully authorized thereto by the parties aforesaid, doth award, order and determine that all the stock claimed, held or owned in the Company of the party of the first part, and each and every member thereof, be transmitted to the office of said Company, at Marshall, Harrison county, Texas, within six months from this date. It is further ordered, and determined, that in default hereof, the said stock be held and considered barred and forever forfeited.

That all stock surrendered and transmitted as herein provided and approved as *bona fide* stock shall be entered upon the books of the Company to the credit of the owner, and a re-issue made and returned to the same in lieu of the stock now outstanding.

It is further awarded, That so soon as the said stock to be returned shall be examined and approved as hereinbefore provided, that a meeting of such stockholders be held for re-

organization and transaction of business of the Company.

It is further awarded, That on the final payment, as heretofore provided by the party of the first part, and the assignment of stock by the party of the second part, then the party of the second part shall deliver possession of said road bed, property, and appurtenances belonging to the same.

It is further ordered, That all the other matters submitted to the undersigned for consideration be reserved for future action.

Done at Committee Rooms, in the city of Marshall, Texas, October 15th, 1858.

G. G. GREGG,
J. MARSHALL,
J. M. WOSKOM,
H. P. PERRY,
BENJ. LONG, } *Committee.*

I have examined the foregoing award and declare the same meets my approbation.

[Signed.] L. P. GRANT, *Pres't.*
J. FOWLKES, *Pres't.*

We certify that the above and foregoing award of five pages is a correct copy of the original on file with us.

G. G. GREGG,
J. MARSHALL.

October 16th, 1858.

SUPPLEMENTAL AWARD.

WHEREAS, The award of this Committee, rendered on the 15th inst., settling certain points of difference between the Old and the New Southern Pacific Railroad Companies, was, after its rendition, examined, approved and signed by each of the contracting parties, through their respective Presidents: Therefore, be it

Resolved, That we hold each party in law and honor bound to a full, complete, and faithful observance of the terms and conditions of said award in its whole spirit, meaning, and intention.

Resolved, That as far as in us lies, we pledge ourselves, and all the influence we can command, to each of the contracting parties aforesaid, and to the country at large, that each of said contracting parties shall and will observe towards the other the terms, conditions and stipulations of said award in its just and true spirit and meaning to its full extent.

Done at Committee Rooms, in Marshall, Texas, October 22d, 1858.

G. G. GREGG,
J. MARSHALL,
J. M. WOSKOM,
H. P. PERRY,
BENJ. LONG.

CENTRAL SOUTHERN RAILROAD CO.

By reference to the last Annual Report, it will be seen that at that time contracts had been made for the grading and masonry from the junction with the Tennessee & Alabama Railroad, to the town of Pulaski, a distance of 35½ miles; the work to be finished by the first day of March, 1859.

Upon this part of the road all the bridge masonry is completed, and the grading in such a state of progress, that it will nearly all be done before the expiration of the time allowed the contractors for its completion.

The heavy rock cut at Elk Ridge constitutes the only exception to a satisfactory progress of this portion of the work. It is the

policy of the company to put an efficient force of negroes at this point as soon as practicable.

The superstructure of the bridges has been contracted for, to be built principally of white pine timber. The great number of railroad accidents caused by the failure of bridges, in the last twelve months, together with the immense sacrifice of life and treasure caused thereby, has demonstrated the extreme folly, not to say high crime of constructing railroad bridges of the common timber of the country through which they pass. Experience having shown the superiority of pine timber for such purposes, we have adopted it for all our bridges of long span.

Until recently, the northern terminus of our road was at a point upon the line of the Tennessee and Alabama Railroad, two miles north of Columbia; but by a late arrangement with that company, we have effected the very desirable object of fixing the connection of the two roads at our depot grounds in the town of Columbia, and adding about eighteen thousand dollars to the available means of our Company.

By this arrangement, the depot grounds at Columbia will be jointly owned, and the expense of buildings borne alike by the two companies, thus effecting a considerable saving to both.

No provision having been made in our original estimates for ballasting the road, and believing that no other appropriation of this accession to our means could be so useful to the road and profitable to the company, the Board have ordered its application to that purpose, and contracts have already been made for the ballasting of about seventeen miles, fifteen miles of which is in the county of Maury, leaving about sixteen miles yet to let; this last is nearly all in Giles county, and we hope will yet be taken in time to be completed in advance of track-laying.

So far as the work on our part of the line is to be considered, we shall be ready to commence laying track early in the ensuing winter; but the time at which we shall commence, depends entirely upon the time that the Tennessee and Alabama Company shall reach our point of connection in Columbia, which, according to their calculations, will be by the first of March next.

We have purchased 3,500 tons of American rails, all of which is to be delivered at Pittsburg by the first of January next.

This amount of rails will be sufficient to lay the track and sidings from Columbia to the depot in Pulaski; and also from the Alabama line to Prospect depot, on Ford's creek.

We have also contracted for two engines—one freight, and one passenger—which are in course of construction, and will be ready for the road as soon as track-laying shall commence.

The cross ties needed between Columbia and Pulaski, have been contracted for, and are now being delivered, much the largest portion of which are of red cedar, from Duck creek.

By an act of the last Legislature, we obtained a change of the State Loan to our road, so as to give us \$9,000 per mile, upon that part extending from Columbia to Pulaski, upon the completion of two-thirds of the work, instead of \$10,000 per mile upon the completion of the whole of the work; by which arrangement we have been able to purchase the iron and equipments for that part of the road, and reduce the State debt of the Company \$33,000.

It has been the policy of the present Board, so to manage the construction of the road, as to furnish the community on all parts of the line with the use of its advantages at the earliest time possible; and we are happy to say, that by agreement with the Tennessee and Alabama Central Company, they will complete their road to the State line (our southern terminus) by the first of July next, at which time we will be ready to lay track from that point to our depot on Ford's creek, thus furnishing the citizens and stockholders of that portion of Giles with the advantages of the road, as soon as they can be enjoyed by any other portion of the country.

On the southern division of the line extending from Pulaski to the Alabama line, a distance of 14½ miles, the grading and rubble masonry is all let to citizens living along the road, except the section known as Hick's Bluff, which, if not let soon, the company should prepare to construct themselves next year; this will require a negro force of about twenty hands.

The tunnel at Madry's Bridge, and the masonry for Elk river bridge, are both in course of construction, leaving only the masonry at Butler's Ford Bridge, the superstructure of that and Elk river bridge, and the Hick's Bluff section yet to let, all of which we expect to accomplish soon.

The grading and rubble masonry let on this part of the road, has all been taken (except the tunnel) at cash prices, one-fourth in stock, the balance payable in the bonds of the company, bearing interest, and due 1st of July, 1860, and 1861, all of which we shall be able to meet punctually, from the two last instalments of stock and tax. The whole of this last division of the work is to be completed and ready for track laying by the first of March, 1860.

Applicable to this portion of the road, we have the benefit of the State loan of \$10,000 per mile, for iron and equipments, and \$85,000 for the bridge and embankments at Elk river.

For a more detailed account of the progress of the work, as well as a statement of the condition of the finances of the company, we refer to the reports of the Chief Engineer and Treasurer, hereto annexed. Having closed our duties for the past year, we commit our charge to your hands, whose duty it is to elect fifteen Directors, to manage the affairs of the company for the next twelve months.

ENGINEER'S REPORT.

The fiscal year now closed, has been employed in carrying forward the work of construction, as rapidly as the means of the company will admit.

At the last annual meeting, all the grading and masonry from the Tennessee and Alabama Railroad to Pulaski, had been let to contractors, and the work was progressing satisfactorily. Several sections are now completed and accepted, and all the local work under contract on this part of the road will

be finished by March 1, 1859, the time required by the contracts.

On sections 15, 16, 17 and 18, the contractors forfeited their contracts, and the work on these sections reverted to the Railroad Company. A part has been re-let, but Dodson's Gap cut, and other of the heaviest work is still carried on by a force employed by the company.

All the bridge masonry between Columbia and Pulaski is completed, and the superstructure is contracted for, to be built principally of white pine.

All the bridge material will be prepared in advance, and framed; and when the track is laid to the vicinity of a bridge site, they will be transported to it on the cars, and immediately raised to their permanent place. This course will cause very little delay, while bridges of far better quality will be provided, than could be built from timber of the adjacent country.

Between Pulaski and the Alabama State line, only one contract had been made at the time of the last annual report, with Hoblitzell and Caruthers, for the tunnel through Madry's Ridge.

The finances of the Company did not permit the prosecution of the remaining work under the system previously pursued—of making quarterly cash payments for a large proportion of the estimates—but, during last winter contracts were made, at cash prices, for all the local work remaining south of Pulaski, except the Hicks' Bluff section, to be paid, one-fourth in stock, three-fourths in bonds of the company, at par, falling due July 1, 1860 and 1861, bearing six per cent. interest, with all the accrued interest payable at the maturity of the bond.

The work embraced in these contracts is progressing satisfactorily. Hicks' Bluff section is not commenced, or let. Next to the tunnel and Elk river bridge, it is the most important section south of Pulaski, and if not put under contract, must soon be begun by a strong company force that will complete it in time for the track.

The masonry of Elk river bridge was contracted for in July last, and considerable progress has already been made with it. No contract has been made for the superstructure, but it will be prepared in time to finish the bridge during next summer.

Satisfactory contracts have been made to furnish the cross-ties for the track to Pulaski; most of them will be of red cedar, a kind of timber, though objectionable for ties in some respects, is so much more durable than any other at command, as to warrant its use wherever it can be obtained.

The Legislature, at its last session, modified the Internal Improvement law, so far as it applied to this road, loaning this company nine thousand dollars of State bonds, per mile, for the 33 27-100 miles from Columbia to Pulaski, when two-thirds the local work between those points was completed, in lieu of ten thousand dollars per mile, when thirty miles was finished. A careful estimate was made in August last of all the work finished and unfinished, with the following result:

Value of work done to August 16, 1858.....	\$162,905 67
" " " remaining unfinished.....	81,322 74
Total value.....	\$244,228 41
Add for engineering and contingencies, ten per cent.....	24,422 84
Total estimate of local work, 33 27-100 miles.....	\$168,651 25

Two-thirds the work being completed as

required by law, the bonds were issued accordingly.

Ballasting has been commenced, and it is designed to have the whole road and track thoroughly prepared, by putting a course of broken stone, six inches or more in thickness under the cross-ties, and filling between them with the same material.

The iron rails for the main track from Columbia to Pulaski, with sufficient side tracks, have been purchased of the best American iron, and will be delivered in Nashville during the coming winter and spring. A sufficient supply is provided to lay the track from the Alabama State line, across Elk river to an accessible point in the valley of Ford's creek, thereby affording the section of Giles county North of Elk river, railroad communication with the Memphis and Charleston Railroad at Decatur, and leaving an unfinished break in our track of about twelve and a half miles.

Two locomotives are in course of construction, to be delivered next spring; and a sufficient supply of cars and other equipment will be provided for opening the road.

We expect to commence laying track at Columbia in March next, and complete it to Pulaski in July or August. At the south end, we hope to lay it across Elk river in August.

The whole road will probably be running through in May, 1860. It could be ready a few months sooner, did the available means of the company permit, and it is important it should. It will form a link in the chain of roads extending from the Gulf of Mexico to the great Northern Lakes, and be the last completed. The Louisville and Nashville Railroad will be finished by December, 1859, thus completing the connection with the roads north of the Ohio river, and the only unfinished link south of us—the Mississippi Central—will be ready still earlier. It is important that the through travel to and from New Orleans and Mobile, become centered upon this route as soon as possible, and before other roads are ready to contend for it. Its opening will not be delayed beyond May, 1860, but is worth extra effort to accomplish by January 1st, 1860. Thus, in fifteen months, this may be one of the great traveled lines of the country, and the stockholders commence receiving some return for their investment.

Should either of the proposed roads south of Decatur be built—to Montgomery and Pensacola—to Columbus, Miss., there connecting with the Mobile and Ohio Railroad—or a central line by way of Selma to Mobile, the Central Southern Railroad will occupy a position no rival can materially affect. The route will be as short and direct as any that will ever be built from Cincinnati or Louisville to the cities of the Gulf, and will be more certain and reliable than any other, from the substantial mode of construction, and character of the country through which it runs. There will be no sweeping away of bridges and embankments during winter floods—at least in Tennessee and Kentucky, and the traveler can set out at any time from either end of the line, with a feeling of security that he will not be delayed before reaching his journey's end.

The amount expended for construction during the year, as shown by the Treasurer's report, has been as follows:

FOR LOCAL WORK.	
Clearing, grading, and masonry.....	\$139,339 79
Bridging.....	1,742 18
Cross ties.....	817 50
Station grounds and right of way.....	2,192 56

Engineering.....	7,606 75
Contingencies.....	3,739 65
Amount expended during the year.....	\$155,355 43
Amount expended previously.....	85,725 68
Total amount to date.....	\$241,081 11
For track and equipment.....	272 95

ESTIMATES OF COST.

The following are the revised estimates of the cost of the road:

From Columbia to Pulaski.....	\$268,651 25
From Pulaski to Alabama Line, (not including Elk river Bridge).....	207,685 69
Amount for local work, exclusive of Elk river bridge.....	\$476,337 14
Elk river bridge.....	60,300 00
Total cost of local work.....	\$536,637 14

TRACK AND EQUIPMENT.

Iron for track and laying same 47 58-100 miles, at \$7,700.....	\$366,356 00
Equipment, rolling stock, etc., for opening road.....	125,200 00
Ballasting—One course of broken stone under ties.....	\$28,548 00
Filling between ties and contingencies.....	11,452 00
	40,000 00

Total cost track and equipment.....	\$531,566 00
Add cost of local work.....	536,637 14
Total cost 47 58-100 miles.....	\$1,068,203 14

To Mr. D. J. Johns, Resident Engineer, with the division engineers and their assistants, great credit is due for the able manner they have discharged their duties, as well as their industry and attention to the interests of the company.

NEW ORLEANS, JACKSON AND GREAT NORTHERN RAILROAD.

In the Mississippiian of Thursday last we find the following very interesting letter from Mr. Calhoun to Gov. McWillie:

OFFICE N. O., J. & G. N. R. R., }
New Orleans, Nov. 13, 1858. }

To His Excellency William McWillie: SIR—I have the honor to acknowledge the receipt of your letter of the 12th inst., inclosing a resolution of the Senate, in the following words:

"Resolved, That the Governor be requested to inform the Senate at his earliest convenience, if in his power to do so, whether the debt of Geo. Peabody and John Henry Schroder, against the New Orleans, Jackson and Great Northern Railroad Company has been paid, and if so, on what terms and conditions."

The debt due to George Peabody & Co., \$261,411 26, and that due to John Henry Schroder & Co., \$337,500, were paid in full by this Company in London, on the 24th September last. These firms took the first mortgage bonds of the Company in payment at seventy-five cents on the dollar, principal and interest payable in New York, all the interest coupons which were payable before the 1st of July, 1859, having been cut off and reserved by the Company. The difference in favor of the Company, in consequence of making the bonds and the interest thereon payable in New York instead of London, is at least ten per cent.

The settlement of these debts was absolute and final. The evidence of the indebtedness of the Company having been surrendered to our agent in the transfer of the bonds, and neither party reserving the right to annul the agreement for any cause whatever.

I deem it proper, while explaining the nature of the settlements made in Europe, to give you a statement of the total indebtedness of the Company paid off since April

last, including that due Messrs. Peabody and Schroder.

The whole floating debt of the Company on the 1st April, 1858, as per the annual report to the stockholders, was.....\$1,323,731 50
To which has been added since.....711,004 29

.....\$2,044,735 49
Paid since.....1,601,231 07

Present floating debt.....\$443,504 42

From this we may with propriety deduct the loans made to the Company by the State of Mississippi, called the "Chickasaw School Fund" Loan, \$185,000, and the "Three Per Cent. Fund" Loan, \$20,000, as they are not payable until 1864, and for that reason can hardly be classed with the Floating Debt.....205,000 00

And the true Floating Debt of the Company, is.....\$238,504 42

There is an inconsiderable sum, which I have no hesitation in saying will be paid off within the next three months, and probably much sooner, provided the holders will allow the Company a reasonable discount for payment by anticipation. It matures as follows:

1858..November.....	\$19,721 17
1858..December.....	63,125 53
1859..January.....	73,432 10
1859..February.....	17,751 38
1859..March.....	15,900 60
1859..April.....	7,684 91
1859..May.....	17,166 59
1859..June.....	8,129 56
1859..July.....	300 00
1859..August.....	15,232 50

Total.....\$238,504 42

The business of the road is at present most satisfactory, with every indication of a steady increase. The average daily receipts of cotton alone are over twelve hundred bales, and the outward freights are correspondingly heavy. The earnings of the road in October were \$84,889 33, and the estimated earnings for this month (November,) are \$120,000. The payment of our debt, and the flourishing condition of the road, have placed the Company in an enviable position in point of standing and credit; and nothing could offer a stronger contrast than the Great Northern Railroad Company of April, 1858, and the Great Northern Railroad Company of to-day.

I am, very respectfully,

Your obedient servant,

J. CALHOUN, President.

We ask our readers to examine the above figures. They offer incontestible evidence of the sagacity of the policy advocated by the present Directors of the road and by this paper, during the memorable controversy with the opponents of extension.

Chancellor Cocke writes to the Mississippian as follows, on this subject:

The State of Louisiana as well as the State of Mississippi, granted a charter to the New Orleans, Jackson and Great Northern Railroad Company, to build a railroad from the city of New Orleans, by way of Jackson, the seat of government of the State of Mississippi, to the Tennessee river, on the way to Nashville, in the State of Tennessee.

The object declared was this, to build the road from New Orleans to the Tennessee river.

We submit that the charter is an entire thing. It may be justly said, that every share of stock, whether taken by the city of New Orleans, the State of Louisiana, the State of Mississippi, or by any and all private stock subscribers, alike involves the duty and obligation to build the road mentioned in the charter. In like manner it is equally true

that every right of way given or condemned, every yard of excavation or embankment made, and every iron rail laid on the road, in all its parts, and to its chartered extent, is applicable to the road mentioned as an entirety.

The High Court of Errors and Appeals of this State, in the case of the New Orleans, Jackson and Great Northern Railroad Company against Overton Harris, holds that each and every subscriber of stock in such a railroad has a right to stand on the terms of his subscription, and that the Legislature has no right to enlarge or lessen the enterprise subscribed to. Therefore, any legislative change of the basis on which the stockholders have paid their money, would not only be unjust, but would, of course, be highly embarrassing and void.

Besides, by the acts of 1854, 1856 and 1857, certain moneys have been appropriated to the said railroad, to be expended on the same north of Canton.

In obedience to the requirements of these statutes, the Railroad Company have actually let out to contract the graduation of twenty-six miles of their road next above Canton, and have pledged to the contractors the said appropriations of the Internal Improvement and Chickasaw School Funds in payment for their work.

The contractors have now employed at work on the road north of Canton, upwards of three hundred hands, with all proper outfit of implements, vehicles, and teams necessary to complete the graduation in less than two years. The contractors have already five miles graded proper for cross ties, and for laying down the iron rails; ten miles have been cleared, and contractors are in full progress to the completion of the twenty-six miles according to agreement.

The citizens in Attalla and other counties on the road, have recently subscribed upwards of two hundred thousand dollars of additional stock, and the railroad Company is preparing to get out thirty-one additional miles of graduation.

Under these circumstances, we submit that the constitution denies the power of the Legislature to pass any law impairing the obligations of these contracts, or to divert the funds pledged for their payment, but if the power were admitted, it would be highly indiscreet in the present condition of this railroad and its progress to use it.

In this connection we can not believe that the Legislature will interfere in the matter, or by its action invite the corporation to withhold from the people of the country along which the road shall pass, the benefits intended by it. We would think it strange that the Legislature would, unasked by the corporation, or the people in that section of the State, seek to override the rights and interests of those who have labored for years and paid large sums of money for the entire enterprise. These people have done this, and in the confidence that there would be a good faith compliance with the duties and obligations under the charter to build the road north as well as south of Canton.

We affirm that there is nothing in the affairs of this Company which invokes the propriety of legislative interference in the matter, and we suppose, of course, that they will not do so.

STEPHEN COCKE.

At a meeting of stockholders in the N. Y. Cent. Co., Erastus Corning and the old directors were re-elected, except J. D. Wolf.

A RAILROAD TO THE PACIFIC.

You will please excuse me for calling your attention, not to the importance of a Pacific Railroad, for that is conceded, and our country is suffering from want of it, but to the mode of getting the means to construct the Northern Pacific Railroad. I don't remember to have noticed as yet any allusion to this method, or any other practical one, and I trust you will duly consider the suggestions and add thereto any other methods.

The railroads now provided for and made to St. Paul and Crow Wing from Chicago and Milwaukee will have exhausted local means, State aid and available land grants. However desirable it may be to sustain those roads by a business beyond that, and to the country beyond that, by extending the Northern Pacific Railroad, yet for want of means it can not be done, unless foreign capitalists can be induced by land grants, at least sufficient to make the road finally, and be made to see that their present large unproductive investments in Canada railroads can be made productive in the use of more of their capital.

Canada railroads lie *too far North* to receive any benefit in business from railroads terminating from the northwest as far south as Chicago, and but little from railroads terminating at Milwaukee, as the cost of transshipment and delay to cross by steam ferry, eight months yearly, at Milwaukee must divert the trade and travel either to the north or south end of Lake Michigan, and every year will render that delay and cost more unpopular. And yet to get that trade, the Great Western Railroad of Canada have permanently invested \$750,000 in the Detroit and Milwaukee Railroad, and recently loaned a half million more, demonstrating the idea I shall advance, that to make good present investments, more means can be had. The State of Michigan itself will furnish a good trade to roads through it and to roads east of it.

The Straits of Mackinaw is the great natural ferry of about four miles for roads of Michigan and Canada to center, the point necessarily for the passage of lake commerce, and for a large population north of it to cross, naturally attracting and combining elements of great importance to railroads.

Land Grants are now made to the Straits from the South. The Grand Trunk and Great Western Railroads of Canada can go to the Straits of Mackinaw, aided by those grants. The Ottawa and Huron Railroad to Sault St. Marie may also go to the Straits, aided by land grants from Sault St. Marie. From there the three Canada Railroads, aided by land grants yet to be made, can go to Crow Wing by Grand Island, Marquette and Superior City, (see map herewith,) and there form a junction with the Chicago roads—thence to the Pacific, aided by land grants.

By affording the Canada interests a chance for a portion of the Pacific trade, and thus making present Canada investments profitable, it is made the interest of foreign capitalists to make our northern Pacific Railroad.

This protective interest to Canada railroads is the greatest inducement to be offered them.

They will not invest in the road beyond Crow Wing simply for the sake of grants of lands, made valuable only by the outlay of their money; even should the lands finally redeem the previous outlay for the road, that is no object, because the road will not pay more than cost of running and sustaining it, and if it should some beyond that, it will be frittered away by bad management and steal-

ing. At least it is fair to suppose so, and hence they must be assured of enough of land grants to finally make the road, which of itself will pay nothing, only in the way of affording the roads east of Crow Wing, owned by them, fair dividends. This consideration will of itself induce them to furnish capital to the Pacific, and it is in the power of the Government thus to invest them. No other proposed route can claim foreign aid because of such good reasons. Our Government can't aid only in lands; in valueless lands she is or may be wealthy. No bill can pass Congress, only by affording equal aid in lands to the Northern, Central and Southern routes, each standing on their commercial merits before capitalists.

The chance for us thus to enlist them is but for a limited time. Soon they will become committed to the North Canada Pacific Road, north of Lake Superior, when they will not help ours, and thus protract ours for want of means and having a competing road. At present, two of the most important Canada roads can be enlisted in the above views, because if the Canada road north of Lake Superior is made, it will divert the trade from them, they being too far south to be benefited. But by going to the Straits of Mackinaw, they secure a division of the Western trade—among the three roads. The road through the mineral regions will develop that country and afford a good market for the produce of the country west of it.

Chicago is no more on the direct route from the East to Iowa, than is Mackinaw City on the direct route to the Northwest from New York.

Lake Michigan naturally forces such a division of the Western and Northwestern trade, and the Strait of Mackinaw is most favorably situated for crossing. Cars can be transferred by ferry boat from point to point, without delay or cost of transhipment.

That country is nearer to market than any other Western State; cheaper lands and good soil, and healthy climate, and a superior wheat country, affording employment in lumbering, fishing, mining, manufacturing, &c., offering great inducements to foreigners, and of interest to New York to be settled.—*N. Y. Daily News.*

IMPORTANT CIRCULAR FROM THE PRESIDENT OF THE MARIETTA AND CINCINNATI RAILROAD CO.

OFFICE MARIETTA & CINCINNATI R. R. CO.,
Chillicothe, O., December 2, 1853.

About a year since the Board of Directors of this Company were favored with a visit from an agent of the foreign Bondholders, representing a majority of First and Second Mortgage Bonds. He gave the strongest assurances that those he represented had no wish or intention to foreclose these Mortgages, provided their interest could be secured from the earnings of the road. A plan was agreed upon with him by which it was proposed to raise additional capital to finish the road.

In the meantime every effort has been put forth to improve the track and machinery, increase the traffic, and secure the confidence of the public in the safety and regularity of the trains. In all these respects, encouraging progress has been made. It was hoped that these unwearied efforts to preserve and improve the property would have secured some degree of consideration. But the only response that comes to the plan, mutually agreed upon, is the report that an odious

speculative combination has been entered into, by which the foreign Bondholders propose to pay ten per cent. of their entire investments to hungry adventurers—provided they succeed in forcing a sale of the road—thus cutting away from all sympathy with other interests, and interposing an insurmountable barrier to anything like conciliation or compromise.

The threatening character of this scheme aroused the holders of Third Mortgage Bonds to protect their interests by a resort to the courts.

Accordingly, suit was brought by a majority of this class of creditors, in the Common Pleas Court of Ohio, on the 27th November, making the Company, the Trustee of First and Second Mortgages, and judgment creditors, defendants.

The prayer of the plaintiffs for an injunction and the appointment of Receiver was granted, and the property has now passed, by order of the court, from under the control of the Board of Directors.

Although thus rendered powerless in its management, the Directors feel bound to make an effort to bring the different interests together, upon some plan of conciliation by which the property may be preserved, instead of wasted in lengthy and uncertain litigation. The true position of the parties in interest may be stated as follows:

First: The holders of First and Second Mortgage Bonds claim, in the order of their precedence, the right to the road and all its appurtenances. They will also doubtless claim that the rolling stock is attached to and must pass with the road—and that, in case a sale of the road is ordered, the right to operate it and collect tolls will be conceded.

Second: In direct antagonism to these interests, the holders of the Third Mortgage Bonds claim that, upon the principle that after-acquired property can not be covered by mortgage, their right to the road is almost exclusive, as but small portions were completed at the time the two first mortgages were executed. In addition to this it is claimed that the Third Mortgage constituted the first and only lien upon the rolling stock—as this class of property is included specifically in that instrument, and is not mentioned in the others.

Third: The stockholders claim that the franchises were conferred by the sovereign power upon them, and that they can not be alienated without direct authority from the Legislature. The statute under which money was borrowed gives the Company, *only*, the right to pledge its property and income.

Fourth: Still another class of creditors claim that they have an equitable interest in the distribution of the income, and appeal to decisions of the highest courts to maintain their view of this question.

It is not intended to argue any of these different positions—to claim that any one is right, or to show which is most likely to prevail. But the Board appeal most earnestly to all parties, to pause at the threshold of litigation, and survey the whole ground. *One thing is very certain.* Even the weakest of these contending parties in interest has power enough to protract litigation until the *property is utterly ruined.* Many of the wooden structures *must be renewed speedily.* The rolling stock is rapidly depreciating, upon an unballasted track. Improvements and repairs are needed in every direction.

In view of these strong antagonisms, resting upon unsettled principles of law, where

no one interest can fairly claim a reasonable degree of certainty as to the result of litigation, it is certainly wise to cast about for some better way of settling the difficulties. Proprietorship itself is a question of secondary importance. The main object and that which all desire is *revenue.*—Lawsuits will not produce income. Large contingent fees, paid to outside adventurers, will not save bridges from destruction, nor ballast the track.

An immediate effort must be made to increase the traffic of the road. The first and most important step in this direction is to secure a rail connection with the Baltimore and Ohio Railroad. To accomplish this object an independent company has already been organized, with power to construct a railroad, nine miles in length, from Scott's Landing to a point opposite Parkersburg, Virginia. It is proposed that the amount necessary to accomplish this shall be advanced by those interested in the home securities, and repaid out of the earnings of the new road.

It is understood that a strong local influence can be enlisted in the construction of a line to Dayton. If the foreign Bondholders will furnish the iron, and the cost of laying it down, the completion of this most valuable connection can be secured.

With these lines built, the earnings will be sufficient to ballast the track, finish the tunnels, and provide sufficient rolling stock.

In this way by a very small outlay of capital, if all parties will exercise forbearance, and work together, the road can be made to work itself out of difficulty. The traffic which fairly belongs to the road is amply sufficient to accomplish these ends, and when accomplished every creditor can depend safely upon receiving his interest.

By order of the Board,
WILLIAM P. CUTLER, Pres't.

COVINGTON AND LEXINGTON R. R.

We have the beginning of what promises to be a lively contest for the possession of this road and its franchises. The parties to the contest will be the First, Second, and Third Mortgage Bondholders, and the Income Bondholders—each class having a distinct interest. From present appearances, the stockholders and endorser's of the company's bonds will have no part or lot in the division.

The income bondholders have made application to a Receiver. This application will come up for trial in a few days before Judge Moore, of this judicial district. It is said the second mortgage bondholders will file a bill shortly for a foreclosure. The income bondholders take the position that without their aid the road could not have been finished—that they improved it to the benefit of the stockholders and first mortgagees alike, and therefore the property should be subjected to the payment of their claim.

In this connection a brief statement in regard to the bonds issued by the Railroad Company will be interesting.

The date of the first bond issued was January 1, 1851. This bond was for \$100,000, to the city of Cincinnati, and was secured by a mortgage on the road. Subsequently the security was changed, leaving the road unincumbered. It is understood that the city of Cincinnati will make an effort to have the mortgage lien re-instated.

The first mortgage bonds, which are for \$420,000, were issued March 1, '52. These bonds are safe in any contingency.

100	Shares Little Miami R. R.	82
100	" " "	82½
25	" " "	82½
200	Indianapolis & Cincinnati	46
90	" " "	46½
47	Columbus & Xenia	81½
100	Cin'tl., Ham. & Day	50
60	" " "	50½
20	" " "	52
100	City Insurance Co.	86
80	Cin. Insurance Co.	95
50	Firemen's Insurance Co.	120
30	Farmers Bank, Ky.	135

RAILROAD TO THE PACIFIC.

Some days since I sought to show you that by suitable land grants to and from the Straits of Mackinaw to Crow Wing, and thence to the Pacific Ocean, through our territory, thus connecting the Canada railroads, foreign capitalists would furnish the money for the construction of our Northern Pacific Railroad, mainly because it would furnish to their now unproductive Canada railroads a remunerative portion of the trade from the west of Crow Wing.

That foreigners would invest in the extension of their railroads to make good their present investments; and that neither of the three proposed Pacific Railroad routes could claim the benefit of such an argument but the Northern one.

I will now endeavor to show you how our United States Government has it in its power of developing in a few years more silver than will make the Northern, Central and Southern Pacific Railroads, and furnish it as fast as it can be expended on the three lines.

Let Congress promptly afford to settlers in Arizona, the same rights they do to settlers in our Western States and Territories, viz: donate and sell them lands, with their minerals. Some twelve or fifteen years since the Government sought to retain the minerals, subjecting the Galena lead mines to a tax of some twenty per cent. of their products. The result was demoralizing to the people, in constant evasions of the law, false reports, fighting and killing of citizens and agents of Government, and loss to the Government. Such a policy was found unpopular, and unsuited to Americans, and prevented the development of the mines, as capitalists would not invest, where it required large outlays and ability, unless they had the power of legally ejecting from their lands, intruders induced by the success of the owners. Hence, Congress passed a law, granting the minerals to the owners of the lands, when the country greatly improved under the increased products of the mines from the security afforded to capital and science.

Let Congress adopt the same policy toward Arizona, and the country will immediately fill up with enterprising, scientific capitalists, who will develop the silver mines, equal, at least in value, to the gold of California.

The past Winter an attempt was made to pass a bill for the survey of the lands of Arizona into agricultural and mineral lands, inviting corruption and retarding the settlement of the country. Our Government has more to make in the rapid settlement of the country, and in furnishing commerce with the silver its citizens only can produce.

Under such laws as now govern our West Territories, 10,000 citizens will immediately settle, and remove the necessity of costly military protection, give protection to our mails, and raise up interests that will construct a railroad with much less cost to the Government than otherwise.

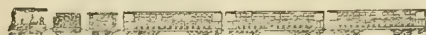
Why should our Government adopt a policy compelled to yield at Galena? Why adopt the inefficient Spanish mining laws for Americans? Why not at once grant to actual settlers, as elsewhere, a quarter section of land, with its minerals, and take its pay in the unprecedented wealth Americans will develop there? Why seek to withhold from settlers, so far from market and civilization, surrounded by Indians, &c., the only incentive taking them there? Why hesitate to do that now which, after loss of years and expense, they must finally do? Why borrow of

foreigners hundreds of millions of dollars at 10 per cent. interest, when labor and common sense will withdraw from the deposits of nature at home, a dollar in silver for less than twenty-five cents, without interest thereafter? It is a fact well known, that surface minerals in some localities will produce from twenty-five cents to four dollars to the pound of ore, averaging at least fifty cents from ores 10 and 20 feet under surfaces, as is now done at the *Heintzelman Mine, near Tubac*.

Individuals only can make such mines productive, the Government being benefitted by the results of individual success. I would be glad, Sir, to have you, and others occupying your position, to labor long and loud, until our Government, in these matters, is governed by common sense.—*Cor. of New York Daily News.*

Winter Arrangement.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

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Leave Wheeling daily, at 12:30 P. M., and 10:26 P. M.

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FOR ALL THE EASTERN CITIES.

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Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

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CONTENTS.—Lotteries, Gift Enterprises.

No. 3 Shows the Tricks of Seducers.

No. 4 In preparation, same subject as No. 3.

No. 5 Tricks and Traps of Horse Dealers.

No. 6 By "Frank Forister."

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DAVENPORT... M. D. WELLMAN... C. M. RUSSELL

DAVENPORT, RUSSELL & CO.,

Railway Car Manufacturers,
MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Pittsburgh, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16*

JOSEPH DAVENPORT.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., *Civil Engineer.*

No. 258 H Street, Washington, D. C.

April 2

ALLEN & NOYES'
METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. This power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jr23-1m

TO THE STOCKHOLDERS OF THE

SOUTHERN PACIFIC R. R. CO.

We, the undersigned, having been appointed a Committee to carry out the plan adopted by the recent meeting of Stockholders at Louisville, to relieve your Company from its present embarrassment and impending ruin, beg leave to call your immediate and earnest attention to the following facts.

By the terms of the Compromise effected with the so called "New Company," it becomes necessary that the entire amount of our indebtedness to them be paid off at once!

To meet this payment it is required that each and every Stockholder comply with one of the three following propositions:

1st. Every holder of Stock not fully paid, must make immediate payment of the entire balance required to bring his Stock up to Five Dollars per Share.

2nd. Every holder of full paid Stock must advance as a loan to be returned with interest, the sum of Fifty Cents on each Share of Stock so held.

3d. Any holder of full paid Stock, who prefers, may surrender one half his Stock to the Company, instead of loaning the Fifty Cents as above.

We deem it absolutely necessary that every Stockholder, who wishes to retain his interest in the Company and to share in its brilliant, and we trust soon to be realized, future, must make immediate response to this call, and pay over to either of the undersigned, on or before the Tenth day of December.

Every Stockholder, who fails to respond to this call by the time designated, will most certainly lose his entire investment; therefore we say to one and all attend to this matter NOW.

J. M. CONWELL, 65 and 67 West Front Street.

JOHN TAIT, 25 Walnut Street.

M. F. CRIGLER, s. w. cor. Pearl and Sycamore.

Cincinnati,

Cincinnati, November 30, 1858.

Louisville, Ky., November 27th, 1858.

Messrs. CONWELL, TAIT & CRIGLER, Committee, etc.

GENTLEMEN:—We need the unanimity and united effort of all of our stockholders, and especially of those of Ohio. You know all the facts, the feeling and disposition of the Convention here, and I, by virtue of the authority given me by Stockholders and by Directors, etc., hereby fully empower you, to do all and everything to meet the exigency, which must be met. Justice full—with the utmost liberality in our power shall be extended, to every stockholder, and those who act as recommended, can and will be protected I can not doubt. The views and the wishes of your stockholders shall and will be regarded and most fully met. Ohio is entitled to and will have a Director at our next election. Receive instalments from all and every holder of Stock Certificates—as we desire that every Stockholder shall be secured to all and every right ever possessed. Very respectfully,

JEPHTHA FOWLKES, President,
Southern Pacific R. R. Co.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

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9 A. M. and 11:00 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:35 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

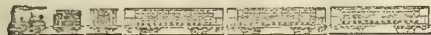
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And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

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L. M. COLE,
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General Western Agent.

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Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:16 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mandrills, Shingle Machines, &c.

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TRABER & AUBERY,
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LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

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And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

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The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

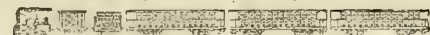
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1858 1858.

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Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted.) for Seymour.

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To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

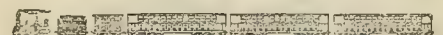
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MIDDLETON, STROBRIDGE & CO.,
Jan 8 ly 119 Walnut st., Odd Fellows' Buildin

Monday, Nov. 22, 1858.

Cincinnati, Hamilton & Dayton



RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR

ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B. & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities. Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off.—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cressline for Pittsburgh, Philadelphia Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:50 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:32 P. M., and 9:05 P. M.

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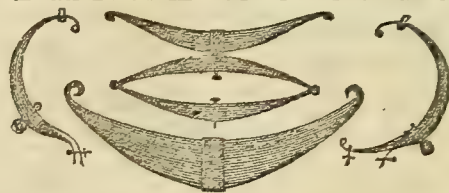
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AND Compound Steam Pumping Engine,



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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
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CINCINNATI:

THURSDAY MORNING, DEC. 16, 1858.

Railroad Record

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HOUSTON, TAP AND BRAZORIA RAILROAD.—There have arrived at Houston and at Galveston, for the Houston and Brazoria Railroad, (being a prolongation of the Tap Road from Houston,) 1,325 tons of iron. There is on shipboard, between New York and Galveston, 500 tons more. In addition, there has been 2,000 tons contracted for, to be shipped direct from Staffordshire to Galveston. This will be sufficient to lay the road to Columbia, on the east side of the Brazos, a distance of fifty miles. The locomotive, chairs and spikes are hourly expected, and as soon as they arrive, the corps of track-layers will be set at work. There are, on the line of the road, 10,000 ties, and 20,000 more to be delivered, to complete the work to the place mentioned. Beyond Columbia, on the west side of the Brazos, the line has been located to the town of Wharton, and the grading of twelve miles of that section commenced.—*Commercial.*

A NEW MOVE—PERSUASION OF THE MARIETTA ROAD—ITS CONSEQUENCES—PUBLIC CHARACTERS IN A NEW ATTITUDE—MR. CUTLER'S STATEMENT.

The newspapers of the day have published what we must consider, one of the most extraordinary transactions, in either a legal, social, or business aspect with which we ever became acquainted. It is the recent conspiracy, or compact, or whatever name it may have, between certain Bondholders in Europe, and a certain MR. HALLETT, to carry on a legal war against the Marietta Railroad Co., and ruin it—if possible! It is rendered remarkable by the recommendation of this Mr. Hallett, by a number of distinguished public characters in the United States, and the easy credulity with which old and established firms, in England, fall into the trap. We do not mean to say, that Mr. Hallett is not the most respectable man in the world, or that the bondholders may not be very wise. But, while we are content with this negative, we should be sorry to take the affirmative. The transaction seems to us altogether queer, and extraordinary. In order to understand it, we present the following proposition, made by Mr. Hallett to some of the bondholders, which discloses fully what he would be at, and who are his coadjutors:

LONDON, Monday, August 2, 1858.

No. 34 Great George St., Westminster.

To the Committee of the Bondholders of the Marietta and Cincinnati Railroad Co.:

GENTLEMEN: Referring to my several interviews with you, and also to the conversation we have had with the Hon. G. M. Dallas and the Hon. J. Y. Mason, touching the affairs of the Marietta and Cincinnati Railroad Company, I have the honor to announce that, with the sanction of the Hon. Millard Fillmore, Ex-President of the United States, and of Messrs. Mason and Dallas, I am prepared to take charge of the interests of the Bondholders of that Company, whether in proceeding to a foreclosure or in taking such other measures as may be necessary to obtain the payment of the principal and interest on such bonds as are secured by a first or second mortgage.

It is understood, according to the above arrangements, that if the road is sold for \$4,500,000, (the amount of the first and second mortgage bonds,) and paid either on bonds or shares, my commission is to be \$450,000 similarly paid; if the road be sold for \$3,400,000 in money, say \$2,500,000 for the first mortgages, at 80 cents per dollar, and \$2,000,000 for the second, at 70 cents, my commission shall be \$340,000 in money.

On this basis I am disposed to accept the shares or obligations, whatever may be the terms the first and second mortgage bondholders have to submit to.

I remit you Mr. Fillmore's (Ex-President of the United States,) adhesion to my proposition to act as agent on the aforementioned conditions. My letters of power and instructions are to be prepared in the sense indicated in this communication.

I agree to disburse, at my risk and peril, the costs of such proceedings, including lawfees, in consideration of my receiving as a remuneration for my time and expense, in

case I succeed, a commission of 10 per cent. on the total amount that may be recovered or secured by a sale or purchase of the railroad, and to be paid in the same way, i. e., in cash, should the bondholders be paid in money: in secured bonds should they accept others in exchange, or in stock should that be the method of settlement.

Here is the proposition, and here are the men to whom Mr. Hallett refers—Mason and Dallas—United States Ambassadors at the greatest Courts in the world, and Millard Fillmore, Ex-President of the United States!

The New York Times, subsequently denied, we suppose by authority, that Mr. Fillmore knew, or had anything more to do with Mr. Hallett, than simply to give him a letter of recommendation, because he was a very enterprising man! We suggest that if our public men are to give letters to all the enterprising men, in the country, they will find themselves in some curious predicaments. Men are enterprising in various directions. Some men have an enterprise in picking locks, and others in picking pockets; and we should suppose that Presidents, and Governors would hardly give them letters, on account of their enterprise!

The proposition of Mr. Hallett is to receive the modest sum of \$450,000 for foreclosing a Mortgage!

It is not uncommon to see, in English papers, a sneer at the American want of taste, and sagacity in diplomacy and business; but, if John Bull is capable of such a transaction as this, he must be set down as an ass, exceeding Jonathan in any quality of that animal.

And from the same paper of November 22, we copy the subjoined:

"It appears from one of the Cincinnati papers that the enterprising American abroad, whose Circular, proposing for the round sum of \$450,000 to 'wind up' the Marietta Road, we recently have published, returned to the country and has gone West, armed with the authority of a portion of the European Bondholders to begin his work. He has already retained Mr. Stansberry and Mr. Ewing, as eminent resident counsel in Ohio. At the time of publishing the Circular as translated from the Paris edition, we intimated the endorsement of two of the partners of the house of Greene & Co. in that city. We have since seen a London edition of the same document, dated as far back as Aug. 2, with the endorsement attached in lithograph form, of Robert Benson & Co."

We are loth to believe that the respectable and intelligent house of Robert Benson & Co., have any thing to do with this business, and if they have, we are quite sure it is under a misunderstanding of the transaction.—Messrs. Ewing and Stansberry have not denied the fact, that they have been engaged, and so far given aid and comfort to this war on the Marietta Road.

This being the state of the case, let us look at the legal condition of things. In old times, such a transaction as this would have

been deemed against policy, if not immoral. For this transaction of Hallett's was simply a plan to cause and encourage litigation; which, under the old English Law, was illegal. But, we have fallen upon other times. In the meantime, however, the law has put another phase upon these proceedings. The Marietta Company, finding that they were to be the victims of a conspiracy, which, if successful, must destroy the property of one half the creditors, (as well as that of the Company,) applied to the Ohio Courts for the appointment of a Receiver. The Court appointed a Receiver, and all the property of the Company has passed into his hands, and the Road is operated by him, now. Subsequently, an application was made to the United States Courts, for a foreclosure, by the parties to the transaction we have just mentioned, and the United States Court turned the case out of Court, on the ground, that the whole road was now in the hands of the State Court. We do not know what is to be the next move, nor exactly how the lawyers are to get along. It seems to us they are in a quandary quite like that of Shylock, who demanded his pound of flesh, and was told he might have it, without the blood!

In truth, we admit at once, the perfect right of the parties to this suit, to have their money, principal and interest; and to have it without more than a reasonable delay.

But, let us look, for one moment at the condition of the bondholders themselves.

What have they to gain by this procedure? First, as we have already shown, they throw away \$450,000. Next, if the road is sold under the *First Mortgage*, then the *Second Mortgage* holders are entirely sacrificed. Next, if it is sold under the *Second Mortgage*, the *Second Bondholders* have to pay off the first holders, unless, we suppose, the *First Mortgagees* will very deliberately give away their property (!), as it seems some of them were ready to give 20 per cent! Before the *Second Mortgagees* (if the sale is made for cash,) can get a dollar, they must advance more money than they will receive.

Ah! the astute Mr. Hallett will say: "We will have the sale made for *Bonds*, and thus we won't advance any money!" Exactly, if the Court pleases. But if the sale is made for *Bonds*, all the world can buy as well as the Bondholders. John Smith will come in, buy the Road, issue his Bonds for the whole debt due these gentlemen, give satisfactory security to the Court; for the Court will ask very little, except the Road; and these pursuivants will walk back, with rather a less amount of bonds than they had before! The highly respectable Mr. Hallett will have a quiet laugh and the bundle of bonds in his pocket; and the great public will laugh most decidedly at a very asinine proceeding.

If the road is sold for cash, either the *First* or *Second Mortgagees* have got to be sacrificed.

Mr. CUTLER, President, has issued a brief and manly statement to the creditors to do just what is right and sensible; that is, to join hands in making the Baltimore connection, which will enable the road to pay interest, and give some chance to other creditors.

TIFFIN AND FORT WAYNE RAILROAD.

It is refreshing to find, in this dearth of railroad construction, a railroad not only making, but going on without difficulties and embarrassments. Such is the *Tiffin and Fort Wayne Railroad*, under the prudent management of Mr. R. G. PENNINGTON. This road makes part of what was commenced in 1855, as the American Central Railroad. Such was the obvious merit of this project, that had the commercial state of the country remained prosperous, there can be no doubt, it would have succeeded, and much of it been constructed, at this time. As it was, however, parts of it only were commenced, and some portion is now actually in construction. One of these is the Tiffin and Fort Wayne section.

To understand this part, we must glance at the general line.

The original plan was to go from New York to Williamsport, Pa.; thence to Franklin; thence to Hudson, Ohio; thence, via New London to Tiffin, on the Mad River Road; thence to Fort Wayne; thence to Chicago; thence, via Lacon and Oskaloosa to Council Bluffs. This was a grand plan, and it had merits, which would have borne it out. It was too great, however, as a whole; and we must consider it in parts. Leaving out all east of Hudson, Ohio, and west of Fort Wayne, Ind., it is plain, there is still left a route of great value.

If, for example, the Great Western and Atlantic is completed—as there is much reason to hope—then the eastern end of the Great Line is completed; for, the Great Western will complete the route from Olean on the New York and Erie, with Hudson. At any rate, there will be a connection with Pittsburg & Cleveland, by the Cleveland and Pittsburg Road. At Ft. Wayne it again connects with Chicago and all the West. On its own line, it must have local business fully equal to its support. It passes through a very rich and productive country. In its own proper limits, this road will connect with seven other roads, among the most important in the country, and if it be extended West, with twelve or fifteen others.

The Charter, and the present state of the Road, are thus stated by Mr. Pennington:

Authorized Capital Stock, Two Millions Five Hundred Thousand Dollars, with power, by law, to borrow money in pledge of bonds

to an amount equal to the Capital Stock. For the purchase of iron rails, machinery, etc., the Board of Directors, by resolution have authorized the issue of twelve hundred of first mortgage bonds, for One Thousand Dollars each, with interest warrants at seven per cent. per annum, payable semi-annually on the first days of January and July of each year; principal due and payable January 1, 1877. These bonds have been prepared and secured by deed of trust upon the whole road, its franchise, income, superstructure, machinery, etc., in the usual manner and form.

From this, it will be seen, that we have now provided for, and expended upon our road bed upwards of seven hundred and fifty thousand dollars, and are free from all indebtedness or liabilities whatever, except those above stated, and most of which are payable in stock and second securities as before mentioned. Thus far the credit of the Company has been prejudiced in no way from the issue, sale, exchange or hypothecation of its bonds or other kinds of securities; and in the purchase of iron rails, machinery and road equipments, should the Company negotiate or exchange a part or all of its first mortgage bonds, the holders of these bonds will not only have the rails, machinery and equipments, received in exchange for them, or purchased by their avails, for security, but in addition will have the already expended \$751,968 91, in 102 miles of road bed, together with the Company's franchise, depot buildings, real estate, and income of the road, as aforesaid in the deed of trust covering these securities. And I feel no hesitation in suggesting to such of the Stockholders as may have means to spare, beyond what they have already contributed by way of subscriptions to the stock of the Company, the propriety of purchasing a portion of these securities, as a safe and profitable investment, while at the same time it will contribute, in some measure, to the means now needed by the Company to purchase iron rails.

In regard to the work done, Mr. Pennington says:

The right of way secured, and the earth work upon the whole line, one hundred and two miles, is nearly completed. Ties for some thirty miles have been delivered upon the line, many of the culverts made, and twenty-one miles of the roadway fenced, requiring but a small outlay of additional labor and means to put the entire line in readiness for the rails.

Such being the condition and prospects of this undertaking, we see no reason why it should not be favored, unless the world means to say no more railroads shall be constructed, then this is one of those which ought to be made.

The rails are all laid on the New London & Stonington Railroad, and this new land route between New York and Boston will soon be in operation. A large steam ferry boat is being built for the transit between New London and Groton, on board which passengers will be enabled to obtain dinner and other refreshments, &c., forming an agreeable break in the tedium of the journey. It is thought this route can be worked in half an hour less time than that via Springfield.

RAILROADS BETWEEN CINCINNATI AND CHICAGO.

The late opening of a new route between Cincinnati and Chicago—the two great cities of the Western lakes and rivers—make it a matter of interest to review the means of communication between these two rivals, and it may not be uninteresting to the reader to hastily glance over a condensed list of the different routes used and proposed, and the advantages possessed by some over others. No other route has been so much talked of, so much written upon, and none other had so many plans proposed, each being urged upon the public as possessing superior advantages, etc., etc., and to the present time is so far from being perfected, as the means of communication between the Queen City and her lake sister; for, after years of calculating and engineering, financing and negotiating, and other nameless operations, men find themselves going, at best, 320 miles to get 250; railroads burning five cords of wood to get where four ought to take them; wearing out five tons of iron for what four ought to do, and so on, incurring from twenty per cent. to one hundred per cent. unnecessary expense on each passenger or ton of freight hauled between the two cities, saying nothing of the time of the passengers consumed in being drawn over a track as crooked as a Virginia fence.

But for the sake of comparison, let us examine some of the routes which have been regarded as the best and most practicable routes, and, for convenience, take them in their order of length, beginning with what we will call—

No. 1.	
To Lawrenceburg, O. & M. R. R.	20 miles.
" Indianapolis, I. & C. R. R.	90 "
" La Fayette, L. F. & I. R. R.	64 "
" Michigan City, N. A. & S. R. R.	91 "
" Chicago, Mich. Central R. R.	57 "
	322 "

Next to this comes the new route *via*. Lima, which we will call—

No. 2.	
To Dayton, C. H. & D. R. R.	60 miles.
" Lima, D. & M. R. R.	72 "
" Ft. Wayne, P., Ft. W. & C.	59 "
" Plymouth, do.	65 "
" Valparaiso, do.	40 "
" Chicago, do.	42 "
	338 "

This route, though sixteen miles longer, has the advantage of running over a less number of roads, and is thereby less liable to delays, etc. Next to this is the route used in place of No. 2, until the opening of the Pittsburg, Ft. Wayne & Chicago Railroad on the 1st inst. This route was as follows:

No. 3.	
To Plymouth, same as No. 2.	256 miles.
" La Port, Cin., Peru & Chicago R. R.	30 "
" Chicago, Mich. Southern R. R.	58 "
	344 "

This route labored under the disadvantage of a change of gauge at Plymouth, which is obviated by the new route. Next is—

No. 4.	
To Richmond, C. H. & D., and E. & H. R. R.	70 miles.
" Indianapolis, Ind. Cent.	68 "
" Chicago, same as No. 1.	212 "
	350 "

This route, though something longer, has always been a popular competitor with the others carrying at the same rates, making the same time, and doing a fair share of the business. Besides these, there are several others used for freight, but seldom for a through passenger business. These are—

No. 5.	
To Dayton, C., H. & D. R. R.	60 miles.
" Springfield, S., D. & C.	25 "
" Forest, do.	68 "
" Lima, P., Ft. W. & C. R. R.	31 "
" Chicago, <i>via</i> . Route No. 3.	212 "
	395 "

No. 6.	
To Xenia, L. M., C. & X. R. R.	65 miles.
" Springfield, do.	19 "
" Chicago, <i>via</i> . Route No. 5.	311 "
	395 "

Routes Nos. 5 and 6 are now shortened six miles by the opening of the Pittsburg, Ft. Wayne and Chicago Railroad from Plymouth to Chicago.

No. 7.	
To La Fayette, <i>via</i> . Route No. 1.	174 miles.
" Tolomo, T. W. & G. W. R. R.	83 "
" Chicago, Ills. Cent. R. R.	138 "
	395 "

No. 8.	
To Richmond, C., H. & D., and E. & H. R. R.	70 miles.
" Logansport, C. & C. R. R.	108 "
" La Fayette, T. W. & W. R. R.	37 "
" Chicago, same as Route No. 7.	221 "
	436 "

No. 9.	
To Indianapolis, by Route No. 1.	110 miles.
" Peru, P. & I. R. R.	75 "
" Logansport, T. W. & W. R. R.	16 "
" Chicago, same as No. 8.	258 "
	459 "

No. 10.	
To Columbus, L. M., C. & X. R. R.	120 miles.
" Crestline, C., C. & C. R. R.	60 "
" Chicago, P., Ft. W. & C. R. R.	278 "
	458 "

These constitute all the routes that are at present being used as through routes.

The following contemplated route, when opened, will materially shorten distance and time:

Route 11.	
To Richmond, C. H. & D., and E. & H. R. R.	70 miles.
" New Castle, C. & C. R. R.	28 "
" Anderson, do.	92 "
" Kokomo, do.	36 "
" Logansport, do.	22 "
" Valparaiso, do. (progressing)	62 "
" Chicago, do.	42 "
	282 "

This route is all completed, except the portion between Logansport and Valparaiso, and that is fast approaching completion, being all under contract by responsible parties, and the whole progressing in a promising manner. The iron is being landed in New York, ready to be sent forward to the line of the road as soon as Spring opens, and the work will then be pushed forward with a strong probability of its completion during the next year. This route is forty miles shorter than the shortest now in operation, and one hundred and seventy miles shorter than several routes which are doing an economical business. Its entire distance is

through a rich farming country, with easy grades, and no curves sufficient to hinder easy and speedy transportation. One hundred and eighty miles of the distance is nearly an air line drawn between the two cities, and without change of gauge.

This Route could be made still shorter by laying a track upon the already graded bed of the C. & C. Air Line Road from New Castle to Cambridge on the Indiana Central, and from thence to a connection with the Junction Road, which would make the distance as follows, from Cincinnati:

To Hamilton, C., H. & D. R. R.	25 miles.
" Cambridge, Junction R. R.	43 "
" New Castle, C. & C. Air Line R. R.	13 "
" Chicago, Route 11.	184 "

Making..... 265 "

This route is all graded, and when Route eleven is completed, this could be made available with little expense compared with the distance saved, it being about fifty-seven miles shorter than any line now in operation, and for grades or expense of building, is quite as favorable as any other.

The shortest of all proposed routes is the Cincinnati & Chicago Air Line, running from Cincinnati directly through Cambridge to New Castle, and from thence to Chicago *via*. route 11, making the distance as follows, from Cincinnati:

To Cambridge, C. & C. Air Line.	57 miles.
" New Castle, do.	13 "
" Chicago, C. & C., Route 11.	184 "

Through..... 254 "

This, when built, makes a distance to Indianapolis as follows, from Cincinnati:

To Cambridge, C. & C. Air Line.	57 miles.
" Indianapolis, Ind. Cent. R. R.	54 "

Through..... 111 "

Another route to Chicago is proposed, which is about as follows, from Cincinnati:

To La Fayette, <i>via</i> . Route No. 1.	174 miles.
" Gillman, (proposed) about.	70 "
" Chicago, Ills. Central R. R.	85 "

Total..... 329 "

Still another has been urged *via*. Route No. 9 to Peru, thence to Plymouth, and from thence by the way La Porte and Michigan Southern to Chicago. The distance would be about as follows, from Cincinnati:

To Peru, Route No. 9.	185 miles.
" Plymouth, Cin., Peru & Chicago R. R.	40 "
" Chicago, C., P. & C., and M. S. Road.	88 "

Entire length..... 313 "

Other routes might be made by combining those mentioned, but those we have given will be a sufficient data to enable those disposed to compare the different routes, and decide for themselves which seems the most practicable, and which is, in reality, the "shortest and most direct" between the two great cities of the Western States. ***

At the last regular meeting of the Baltimore & Ohio Company, Jno. W. GARRETT, President, stated that the saving resulting to each of the four Atlantic lines, from the St. Nicholas compact, was not less than \$100,000 a month.

MEETING OF STOCKHOLDERS OF THE N. Y. C. R. R. CO.

At a meeting of the Shareholders of the New York Central Railroad Company held at the rooms of the Company, in the Exchange, in the city of Albany, on the seventh day of December, 1858.

Hon. Schuyler Livingston was called to the Chair, and James C. Cook elected Secretary.

"The Committee appointed at the meeting of the Stockholders of the New York Central Railroad Company, held December 9, 1857, for the purpose of examining into the accounts and transactions of said Company," consisting of Messrs. John P. Moore, Moreau Delano, Charles Stebbins, Albert H. Tracy, and John T. Clark, made the following Report:

That at their first meeting for prosecuting the proposed examination, it was discovered that the field was so extensive as to preclude the hope of examining it in all its parts within the measure of the time which it was practicable for the committee to devote to the subject. It seemed necessary, therefore, that they could go through, with thoroughness, so as to present results that would be useful, if not satisfactory to the stockholders. In this view, it was concluded to give particular attention to the financial condition of the Company, at least so far as to satisfy themselves what it really is. But to accomplish this it was necessary to wait until a full statement of the accounts for the last fiscal year, ending the 30th September, could be prepared, and finding this could not be done in time to enable the Committee to make their report twenty days before the annual election, as was contemplated by the resolution for their appointment, they recommended to the officers of the Company to notify the stockholders of a meeting to be holden on the 7th of December, the day previous to the annual election, and which recommendation has been carried into effect.

The Committee has entered on the investigations, with the wish and intention of pursuing them thoroughly, as far as their time would allow, and although they are aware of several matters which it might be useful to the company should be farther inquired into, yet they flatter themselves that their own labor has not been without fruit, at least they are sure it has been earnestly and honestly applied, and so far forth as their report contains statements of facts, that they may be confidently relied in.

We have not found it necessary to employ accountants or clerks, as was contemplated by the resolution of the Stockholders, for every required facility and aid were promptly afforded at the offices of the company, and we feel it to be just, as it is pleasant, to say that in every department examined, we found system, intelligence, and diligence creditable to those employed, and which should be gratifying to the Stockholders.

In pursuing the examination of the present financial state of the Company, we have taken much pains to establish its relation with that presented in the last annual report of the Company.

By that report, the liabilities of the Company appeared to be as follows:

Funded debt.....	\$14,507,510 17
Bills payable.....	197,028 48
Trustees S. & U. R. R. Co..	1,666 92
Liabilities assumed for Rochester and Syracuse Railroad Co.....	20,918 54
Unclaimed dividends.....	4,593 15
Due for expenses of operating road.....	305,071 47
Accrued interest and unpaid coupons.....	361,687 49
And during the fiscal year ending 30th of September, this amount has been increased by bonds issued for funding the debts assumed for the former companies.....	\$15,498,426 32
	\$886,000 00

And during the same time reduced as follows:

Paid to sinking funds in hands of the State Comptrol er...	\$14,070 63
Bonds of Roch. Lockport & N. F. Co. paid.....	2,000 00
do. Albany & Schenectady do. Buffalo & N. F. Co.....	7,000 00
State Stock for Auburn and Roch. R. R. Co. redeemed..	9,000 00
Bonds for funding debts of old companies p'd and cancell'd	200,000 00
Subscription bonds do.	29,000 00
Real estate bonds do.	22,000 00
Mortgages for lands diminish'd	4,000 00
Bills payable, do. paid....	10,704 08
Liabilities Roch. & Syracuse R. R. Co. do. and paid....	159,033 48
Unclaimed dividends, do. do.	20,918 34
Unpaid operating expenses, do.	1,121 65
Accrued interest, do. do....	223,143 86
And Buffalo & N. F. R. R. Co. paid.....	32,417 91
Increase debt, certificate sinking fund.....	500 00
	160,600 00
	\$895,512 32

Showing a decrease of the liabilities of the company during the year.....

But it will be noticed to accomplish this result, the accumulation of the year to the sinking fund has to be taken as a part of the payments, which, although in one sense strictly correct, in another may be regarded as virtually suspending the effect of the sinking fund for the year for accomplishing an actual reduction of indebtedness. Excluding this item there appear an increase of liabilities for the year of \$150,087 68, which will be found to be considerably less than the amount charged during the year to construction account. And in regard to the other items which are above stated, as diminishing the liability, the committee have taken pains to be satisfied of their correctness, and of the fitness of regarding them as positive diminution of indebtedness.

It will be observed by the Company's annual report for this year, that the sum charged to construction account for the year is \$216,702 48. The committee have carefully scrutinized the elements of this charge, which consist in real estate purchased, new and additional structures, new and additional side tracks, and new and additional rolling stock.

The real estate purchased appears to be such as was clearly desirable, if not absolutely indispensable for the company to possess. The new structures, principally at West Albany, such as could not well be dispensed with, although the expenditure on some of them, particularly the new engine house, has been larger than the committee can see to have been inevitably required. The large item of \$85,000 for new cars is considerably less than the actual outlay for them. These cars, it appears, were delivered under a contract entered into when the requirement for additional equipment appeared very different from what it has for the last eighteen months. But there seems to have been no alternative but to receive the cars and pay for them, although they have increased the rolling stock of this description much beyond present need, and in excess of any value of it ever before

possessed by the company of more than \$96,000, the difference between this sum and the \$85,000 charged to construction account having been charged to expense account. The committee are glad they are able to add that the contract under which these deliveries were made has been finally closed.

The length of new side tracks, laid within the year, exceeds nine miles, and was of considerably greater cost than the sum charged to construction on account of it, so that the committee are satisfied that the whole amount carried to construction account, is less by several thousand dollars than the cost of the additions made to the property of the company during the year. But still, the committee are of opinion that only the most urgent requirements can justify enlarging the construction account by adding to the indebtedness of the company. Such improvements and extensions should, as a principle, be made only from the net earnings, whether these be increased by enlarged receipts, or by diminished current expenses. And if this means fails, and the required improvement is indispensable, then it should be paid for by diminishing, or if need be, withholding dividends. In the latter case, there would be no apprehension of making improvident or excessive outlays. But the financial condition of many railroad companies admonishes of the danger of increasing permanent liabilities by accumulating the construction account:

The capital is stated in the report of 1857 to be.....	\$24,136,660 69
And by the report of this year.....	24,162,000 00
Showing an increase of.....	45,739 31

But this increase is rather in figures than in fact, for it is intended to represent an amount paid for account of the Lewiston Railroad Company, by this company, and for which it is authorised to issue its stock; but the stock has not been issued, and no liability on account of it is outstanding. The same explanation is applicable to the sum of \$142,110 69, which, heretofore, has been charged to the stock liability of company, the actual amount of which now is 23,994,550 dollars, being the same as for several years past, and the exact amount upon which dividends have been paid.

The committee have no hesitation in expressing its entire confidence that, at the end of the last fiscal year there was no established indebtedness of the company beyond the several items stated in its annual report; and they have ascertained that since the end of the fiscal year the liability of the company on acceptances, as it appears in the annual report, has been extinguished, and that no indebtedness of this description now exists. The committee take the liberty to express a hope that such may long be the case; being persuaded that the company should very rarely be in need of such forms of credit; and if the necessity should ever occur, a rule should be rigidly adhered to, that no acceptance should be made except by the Treasurer. But, although the company, since the end of the fiscal year, has extinguished some liabilities, it has also incurred others, particularly one with the Niagara Bridge and Canadaigua Railroad Company in the form of a perpetual lease of the road and property of that company, for which it has obligated itself to pay the annual sum of sixty thousand dollars in half yearly instalments. As the company has the privilege of paying, instead of annual rent, the principal sum of one million of dollars, and probably, at no distant

day may decide so to do, the transaction may be regarded as equivalent to a direct increase of the company's funded debt to the extent of one million of dollars.

The committee do not consider it to be within its province to discuss, in this place, the policy, or propriety of this important measure.—Certainly it is not in conformity with the expression made at the last annual meeting of the stockholders that "no subscription, endorsement, lease or other implications shall be made for or with any other corporation, individual or individuals." But still it may be that the considerations for consummating the measure were of such magnitude and urgency as to justify the Board of Directors in overlooking, in this instance, the opinion of the stockholders as thus expressed. And the committee are willing to say that, so far as they have knowledge of the subject, they are satisfied that the arrangement is decidedly beneficial to this company.

The committee have carefully examined the bonds purchased for account of different sinking funds to 1st of October last, as stated in the annual report of the company, and have ascertained them to correspond with the amount stated in the report, and have found them all to be effectually cancelled.

The committee have made particular efforts to become acquainted with the condition of the road, and of the rolling stock, and of all other property of the company; and with this view a part of the committee went over the line of the road, accompanied by some of the officers of the company, and stopped at different points to make such examinations of the station buildings, depots, machine shops, freight houses, and portions of the rolling stock as the opportunity permitted. Of course the opportunity was not sufficient to allow thorough examination of all structures—especially of the bridges. But, to every appearance, the road and all its appurtenances are in excellent condition, and all the undersigned concur in the opinion that, all this time, they are in a condition superior and of greater value than ever heretofore, and are capable of doing an increase beyond the present business of at least fifty per cent. And, in this connection, and in view of the melancholy accident at the Soquoit Creek, they are gratified to observe that a system of bridge inspection has been adopted which they hope may be made yet more thorough and complete, and at all times rigidly enforced.

The committee have, with pleasure, discovered that in many respects the expenses of the company have been diminished during the past year, and a commendable degree of economy introduced into some branches of the service, but they can not say they are satisfied the full measure of reduction, compatible with the best interests of the company has been reached, or the maximum of economy in the administration of its affairs attained. It might seem invidious to point out particular examples of undue expensiveness, and it might be unsafe for the committee with its limited knowledge, which, at best, is all it could acquire of the extent and value of services rendered, and the measure of expenditures required in different departments, to decide on the reductions and changes that should be made. They have, therefore, to content themselves with earnestly recommending the subject of further retrenchments of expenses to the board of directors, with hope and confidence that they will give to it early and thorough attention.

The committee trust it will not be concluded

ed that their labors have been limited to the topics discussed in their report, for, on the contrary, they have bestowed time and care on many others. In most, their enquiries having had a satisfactory result, there remained no inducement for speaking of them, and to a few of a different nature they have not had time to bestow the thorough examination which alone would warrant condemnatory conclusions.

December 7, 1858.

Respectfully submitted,

JOHN P. MOORE,
MOREAU DELANO,
CHAS STEBBINS,
ALBERT H. TRACY,
JOHN T. CLARK.

Committee.

After the reading of the same by the Secretary, on motion of Hon. Hugh White, it was ordered that the Report be accepted, and the thanks of the stockholders be tendered to the committee for their services.

Mr. Albert H. Tracy, one of the members of the committee, said he desired to call the attention of the meeting to the sixth page of the above report, where the committee advise that "a rule should be rigidly adhered to, that no acceptance should be made except by the Treasurer," and to state in behalf of the committee, that they had labored under the idea that officers of the company, other than the Treasurer, had made such acceptances; but that they had since learned and were convinced of the fact, that the Treasurer alone was authorized to, and that he alone had made acceptances on behalf of the company. He desired to make this statement to the meeting to correct any inference to the contrary that might be derived from the report.

On motion of Mr. White, seconded by Hon. Russell Sage, it was ordered that the Board of Directors be requested to make provision for defraying the expenses of the committee.

On motion of Mr. White, seconded by Mr. Sage, it was ordered that the committee above named be requested to continue their services in like manner for the ensuing year.

On Motion of Mr. White, it was ordered that the meeting of the shareholders be held at this office, on the day of the election of Directors of the company to be held in the year 1859, and prior to such election, unless the committee above mentioned deem it expedient to, and do call such meeting before that day.

On motion of Mr. John P. Moore, seconded by Mr. White, it was ordered that the said committee have power to fill any vacancies that may occur therein.

On motion of Mr. White, it was ordered that the proceedings of this meeting be delivered by the Secretary thereof to the Secretary of the company to be by him recorded.

On motion of Mr. Sage, the meeting then adjourned to Wednesday, December 8th, at 11 o'clock A. M.

—The application for a decree to sell the Cincinnati, Wilmington and Zanesville Railroad on behalf of a portion of the Second Mortgage bondholders, has been refused. The counsel for the Company contended that large interests would be sacrificed by a summary proceeding at the present time, but if they were permitted to go on that they would be able to meet their ordinary liabilities, and pay the interest by the 10th of April next. They therefore asked that all legal proceedings should be stopped until that time. Charles Borland, Esq., President of the Company,

gave a brief history of the affairs of the corporation, and the prospects for the future, and insisted that all parties interested would be greatly benefited by the delay asked for by the counsel representing the Company. The Court, Judges McLean and Leavitt, decided to refuse the application for a final decree previous to the 10th of April. After that time such relief would be granted as might seem equitable in the premises.—*N. Y. Tribune.*

THE MANAGEMENT OF RAILROAD PROPERTY.

One valuable result of the embarrassments of the past few months, has been sifting of the errors—not to say speculation—in railroad management. Railroad property, representing hundreds of millions of money, must, ere many months more, find a substantial basis. Its real value, like that of all other property, must be estimated by the actual revenue it will pay upon a specified capital. If with honest, energetic management, it should be found that a railroad costing \$20,000,000, will pay only six per cent. on ten million, the latter amount is all it is worth; and should that \$10,000,000 be represented by bondholders, the sooner they get possession of the road the better. The stock may be a very convenient football to amuse the bulls and bears of Wall street—one with which they may play successful games of sharp practice on sanguine excited speculators, and with the large amount of similar "fancy stocks" constantly upon the market, enable them to disturb, and in fact, make fearful convulsions in the financial affairs of the country. It is plain, therefore, that it would be better for the financial stability of the country that such a road, and all others whose earnings will not pay the interest on the real indebtedness, afford a surplus to pay it off gradually, and pay the stockholders a reasonable per centage upon their investment, should at once reduce their stock to an amount upon which their earnings would pay at least five or six per cent.

We noticed a few days since that the Fox River Valley railroad had gone into the hands of the bondholders. There are many other railroads East and West that must take the same course. It has long since been conceded that the New York and Erie road can never escape from its embarrassments. Intrinsically its stock is not worth a single dollar and never can be. Mr. Moran may struggle hard against impending fate for his modest salary of \$25,000 per year, but all his efforts must prove abortive. Better let all such roads be placed in the hands of those who represent a capital on which, with prudent, energetic management, they can pay a reasonable dividend.

But it is not to be denied that many, perhaps most, of the evils which beset our railroads are capable of being removed. The first, and perhaps the chief thing to be done, is to place all railroads in charge of intelligent energetic and honest men. Directors should be specially solicitous that all who have control of any department should have all these requisites, they should be held to the strictest accountability; but directors, being satisfied that they have such men, should not interfere with and thwart their arrangements. The superintendent should have supreme control of all matters within his jurisdiction; and if he is worthy of his post, the road will be managed with much more efficiency, economy and profit than if the other officers are constantly proffering their counsel.

Economy in every department is, of course, essential. Mr. Brooks stated in the Cleveland Convention, that \$10,000,000 out of the gross earnings of \$50,000,000 of the railroads of the country might be saved with rigid economy, to the stockholders. Such a saving would at once place railroad property upon a different basis, and many roads which now have before them the prospect of utter ruin at no great distance in the future, would very soon be placed upon a paying basis.

In spite of the disrepute into which railroad property has fallen, and the mismanagement and speculation through which it has passed, most of it has a positive value, and when reduced to that standard it will have reached its true and appropriate position. But the country can by no possibility afford to let the railroads stop so long as they can be made to pay their running expenses, and no one expects the building of them, especially at the West, to cease. They must and will be extended westward through our new States as fast as the population and trade of those States may require. But a reform in the building of new roads should be rigidly enforced. They should be built for actual money. If State or other credit must be used, let it be converted into money and let the contractors complete for work and material at their lowest cash value. The nominal cost of railroads for the past few years has been nearly doubled by the pernicious system of paying for almost everything in "securities," which, being interpreted, means paying two prices for everything. To all this species of "financiering," the experience of the past few years should interpose an impassable barrier. Let every thing be reduced to the cash standard; let rigid economy, intelligence and strict honesty be the standard in all railroad management, and the country will have more than half recovered from the embarrassments of the last fifteen months. Indeed if these results could be secured by these embarrassments, so far as the entire country is concerned, it would doubtless be largely the gainer by the financial troubles which most men have had occasion so deeply to deplore.

We copy the foregoing remarks from the *Chicago Press and Tribune*. The editor of the *Sandusky (Ohio) Register*, in an article on the same subject, says:

"In this country there are not far from one thousand millions of capital invested in railroad stocks. At least one-half of this amount is in the last throes of departing life, and unless the country should unexpectedly be relieved from its present paroxysm of financial asphyxia, by some fortuitous stroke of good fortune, it must inevitably pass away and become dead capital in the hands of its owners. In contemplating this prostration of railroad stocks, the mind is at once led to inquire into the causes that have produced this result. At the very threshold we are met with the general and sweeping solution, that there are too many railroads in the country; that capital and labor have been too freely invested in this branch of enterprise; in short, that the facilities for communication and transportation by rail greatly preponderate over the demands of travel and commerce. It must be admitted that this is very plausible reasoning, forcible and convincing in its general effect, and withal, in a measure true. But we must not cut short our inquiries here. Beyond this lies a cause more potent, we think, in producing the evils railroad conventions essay to remedy, and one whose modification is more possible than the first met

with. We refer to the bad railroad management of our country.

There is no illustration we deem so apt of the nature and effect of railroad management under the present regimen, than to workings of political conventions. In these the voice of the people is almost wholly lost in the selfish action of a particular coterie. The masses delegate their power to a few political gamblers who resort to the convention hall, and by the necessary skillful machinations, subvert the will of the people, defeat their purposes, and reach the ultimatum of most conventions, the accomplishment of the ambitious personal ends of the actors only. It is so in the management of our railroad. The people subscribe to a certain line of road, under profuse promises of an abundant return of heavy dividends, and pay in cheerfully the amounts thus contributed. The road is constructed, an officer elected, business pours along the line, and big are the expectations of hopeful stockholders. One, two, and even three years pass, and these parties have not received the extravagant dividends promised, and which they might justly expect to be forthcoming. The liquidation of immense floating debts, contracted for what purpose they can not ascertain, is alleged as one of the abysses which have swallowed up those anticipated returns. Other fictitious and enigmatical excuses are urged, and innocent stockholders are really forced to believe that they are the victims of uncontrollable circumstances. Meanwhile, the affairs of the road become more and more embarrassed, and finally a receiver is appointed, and it passes into liquidation. When too late to be remedied, the stockholders perceive they have been dealt with by an officer—one-half of whom are totally ignorant of their business, and the other half the most consummate knaves—who have failed to carry out the wishes of those who delegated them official power. The foregoing, we venture to say, is the history of nine-tenths of the bankrupt railroads in the United States.

This, then, we say, is the chief evil to be remedied,—the injudicious choice of an officer. Let stockholders be represented fully and unreservedly in the management of their road. Let it be operated by those whose main interests are in such road, and not in that of a rival corporation; for in the latter case there is a temptation to sacrifice the interests of the whole body represented to the individual welfare of the representative."

RAILROADS IN CHILI.

The track of the Copiapo Extension Railway, running from Pabellow to Chanareillo, is now completed for a distance of twelve miles. On the 29th of July, Mr. Taggart, the mechanical engineer of the Copiapo Railway, made an experimental trip over this new piece of road with the engine Chili, which was highly interesting and satisfactory. The engine passed with ease around the sharp curves of 500 feet radius, and up the steep inclines of that road, which vary from 170 to 224 feet per mile, using the steam of 100 pounds pressure expansively cutting off at half stroke, in cylinders of 10½ inches, with wheels of five feet diameter, until she reached the terminus, at which point the engine stood at an elevation of 4,075 feet above the ocean, which is over 1,000 feet higher than any engine climbed before. The summit of the railway from Vienna to Trieste over the Simmesaag, in the Alps of Austria,

is supposed to be the highest previously crossed by a locomotive. This summit is less than 3,000 feet above the sea. The summit of the Blue Ridge in Virginia, on the Baltimore and Ohio Railway, supposed to be the next highest, is less than 2,700 feet. The summit of the Copiapo Extension Railway, which is at the distance of two miles from the present terminus of the railway, is 4,470 feet above the sea. Before the return of the next celebration of Chili independence, the steam will have surmounted this high point, and the shrill whistle of the locomotive will have sounded its exulting cry among the hills of Atacama, at an elevation of 1,400 to 1,500 feet higher than any other part of the world. This is a point in the progress of railways worthy of note. It leads the reflecting mind to believe that the day is not far distant when the locomotive will find its way to the summit of the Cordilleras, opening new channels of commerce and wealth to the natives on the east and west.

The Copiapo Extension Railway is being built under the direction of Mr. W. W. Evans, for an English company. It is reported that another railway, to connect the rich silver mines of Tres-Puntas with the Copiapo Railway, a distance of fifty-four miles, will soon be commenced for another English company, under the direction of Mr. Evans. This road will have its terminus in the desert of Atacama, at an elevation of over 5,000 feet above the sea. On the whole route there is no vegetation, nor is there any water, nor does it ever rain in this region. Yet at these mines, so high in the mountains and so far from the actual sources of luxury, are often to be found on the tables of the miners the choicest wines and the most costly delicacies which money can produce. Mines which can yield metal worth from thirty to thirty-four thousand dollars a ton, can well afford to indulge its directors in luxuries, and laugh at all expenses. During the "Fiestas," the common creek miner can often be seen indulging his own and his Senorita's fancy for a drink in a punch, which costs him an ounce of gold. The line of this railway to Tres-Puntas has rich copper mines on both sides for most of the distance. Besides the silver mines at the terminus, there are also many gold mines. It remains to be seen what other mineral wealth can be developed in this truly wonderful metallic region when this railway is completed.

OUR PACIFIC EMPIRE.

Geographical Features of the Northwestern Territories—The Northern Route for the Pacific Railroad—Is the Climate too Cold!

LECTURE OF THE HON. ISAAC J. STEVENS BEFORE THE NEW YORK GEOGRAPHICAL AND STATISTICAL SOCIETY.

After referring to the wonderful progress of the great Northwest during the last twelve years, and to the early explorations which had been made in that part of our country, he entered in detail into a consideration of the geographical features of that wonderful region. On the north-western coast we have, said he, the most extraordinary series of harbors and roadsteads in the world, while the forests have an inexhaustible supply of lumber and spars. The coast fisheries of cod and halibut stretch from the mouth of the Columbia to Vancouver's Island. There is coal to be found along Puget Sound, and men

who have a practical knowledge of it say it will do for river navigation, and are of the opinion that it will be found suitable for ocean steamers. In regard to the spars, I may add that we have sent three large vessels loaded with them for the French and English navies, and their inspectors have pronounced them the best and the soundest spars they have ever seen. The climate of the country along Puget Sound and Columbia river is so mild that there is no ice in the winter, and the people have to send to Sitka, in the Russian possessions, for their supply. The farmer has from September to March to sow his wheat, and the poor man who goes out there will have with six months of seed time a large harvest. The summer is without rain, so that the grain never mildews or rusts. East of the Cascade Mountains, we have a vast pastoral and agricultural country, which only requires the simple labor of man to produce in the greatest abundance.—Father De Smet, the Jesuit missionary—a man whose name is a tower of strength and faith—has stated emphatically that that whole country is rich in mineral wealth. You are familiar with the fact that the Jesuit missionaries are men of great intelligence—men of high scientific attainments. They have great practical knowledge of the country, and in that region are most admirable farmers. It is Father De Smet and the other good fathers who have labored so hard among the Indians, and who have endured cold and hunger, and contumely, that they might do a Christian work among those savages. They are the witnesses who give evidence in regard to the mineral wealth of this country and its agricultural capacity. It is a grateful duty for me to perform in this presence, to bear my humble testimony to their services. [Applause.] The lecturer here went into a consideration of the subject of the Pacific Railroad and the character of the climate along the route which he proposed. The great objection which had been made to that was the intense cold of the winter, an objection which he contended was not based on facts. He then proceeded to prove, by observations made at different points, that the winter was much milder than is supposed and than has been stated.

The mean winter temperature at Fort Benton, said he, in 1853-'54, was 25 deg. 38 min. above zero. The average at Montreal, on the Grand Trunk Railroad, for the same year, was 13 deg. 22 min., and for a mean of ten years, 17 deg. 80 min. above zero. At Quebec, it was in '53 and '54, 11 deg. 03 min. above zero; and for a mean of ten years 13 deg. 30 min. above zero. On the great Russian Railroad from St. Petersburg to Moscow the comparison is very similar. The mean winter temperature for a series of twenty-one years at Moscow, is 15 deg. 20 min., and at St. Petersburg for a mean of twenty-five years, 18 deg. 10 min. above zero.

At Fort Snelling, on the great lines through Minnesota, from St. Paul to Pembina, and from St. Paul to Breckenridge, now actually in process of construction, the mean winter temperature of 1853 and 1854 was 11 deg. 64 min., and the mean of thirty-five winters 16 deg. 10 min. above zero. Thus in the winter of 1853-'54, an unusually cold winter, Fort Benton was 12 deg. warmer than Montreal, 14 deg. warmer than Quebec, 14 deg. warmer than Fort Snelling, 10 deg. warmer than Moscow, and 7 deg. warmer than St. Petersburg. Looking to the Bitter Root Valley, we find its average temperature in the winter of 1853

and 1854 to be 24 deg. 90 min., and 1854-'55 30 deg. 30 min. above zero, making it for the two winters respectively, 10 deg. and 15 deg. warmer than at Moscow, and 7 deg. and 12 deg. warmer than at St. Petersburg, 12 deg. warmer than at Montreal, and 14 deg. warmer than at Quebec. But I will not content myself with giving you the average winter temperatures. Let us consider the greatest cold observed. The greatest cold during the winter 1853-'54 was 29 degrees below zero at Cantonment Stevens. At Fort Snelling it was 36 degrees, at Montreal 34 degrees, and at Quebec 29 degrees below zero; from which you will see that on this route the greatest cold is not equal to the greatest cold on the route of the Grand Trunk Railroad of Canada. The same fact is unquestionably true of the great artery of Russia, from Moscow to St. Petersburg; but I have not been able to obtain the daily observations for purposes of comparison. We will look at it in another point of view: Take the number of cold days when the average temperature was below zero. The temperature was below zero twelve days at Fort Benton, ten days at Cantonment Stevens, eighteen days at Fort Snelling, eighteen days at Montreal, and twenty-three days at Quebec. Thus you will see that there were more cold days on the line of the Grand Trunk Railroad and on the roads in Minnesota than on this Northern route. Having compared the average winter temperatures and the number of cold days, let us look at the climate in another point of view; take the number of warm days when the average temperature was above freezing point, and I find that the thermometer at Fort Benton was forty-three out of ninety days, and at Cantonment Stevens thirty-two out of ninety days above the freezing point, against only six days out of ninety at Fort Snelling, five days out of ninety at Quebec, eight days out of ninety at Montreal, and eighteen days out of ninety at Albany, all in the winter of 1853 and 1854.

But it may be objected that the temperature of Fort Benton and Cantonment Stevens is not the measure of the temperature of the intermediate rocky range through which the route passes, and which must be much lower. Fortunately the party of Lieut. Grover, which has been already referred to in connection with the depth of snow, made observations of temperature on the route, and it has been found by careful comparison that the party made the passage during the extreme cold weather of that winter, and the temperatures observed, therefore, indicate the extremest cold of the pass, and not the usual cold. A very intelligent young man who accompanied Lieut. Grover from Fort Benton to Fort Owen returned immediately, and found the weather very mild and pleasant in the pass, corresponding to the observed temperatures at Fort Benton and Cantonment Stevens. The mean temperature in the pass from January 12 to January 23—twelve days—was 10 1-10 degrees below zero; at Cantonment Stevens the mean temperature was 5.2 below zero; at Fort Benton 7 3-10 below zero. The greatest mean cold of any day observed in the pass was 22 degrees against 24 degrees at Fort Snelling, and a still lower figure at Pembina. The fact that the winter of 1853 and 1854 was unusually cold in the mountain region of the northern route, is shown in the fact that in the Bitter Root Valley the thermometer never went down to zero in the winter of 1854-'55, while it fell as low as 29 degrees below zero in the winter of 1853-'54.

The average mean temperature of this valley in the winter of 1853-'54 was 24.90, whereas in 1854-'55 it was 30.30. The same general result, determined by observation, as regards the temperature of the pass, would be arrived at by using the formula that every 1,000 feet in altitude would depress the temperature three degrees. Now, only five miles of the pass is more than five thousand feet above the sea, the greatest altitude being but 6,044 feet, and the average height of the pass is but about four thousand feet. The cold of the pass—considering simply 165 miles of the distance where the altitude exceeds three thousand feet—will be only from one to seven and a half degrees colder than that at Fort Benton.

Gentlemen—continued the lecturer—it does seem to me that these facts, drawn from official records, every one of them entirely reliable, ought to settle forever the question which has been raised prejudicial to this route, that it will be obstructed by snow in cold weather. Why, sir, so successful has been the great railroad from Moscow to St. Petersburg, that they are now pushing railroads in all directions, running them into regions truly Siberian, crossing tracks where for three months the thermometer never rises above zero, and for many days the temperature is lower than the greatest cold ever reached in the mountains of the United States. And we find that Canadian roads are being extended westward, utterly regardless of these objections, experience having shown their futility. Mr. President, I was raised in a snow country myself, and have helped to break out roads encumbered with snow. I have lived in the snow State of Maine, and I am familiar with lumbering operations on the Kennebec and the Penobscot, where timber is cut, roads are opened, and logs are hauled to the streams to have them in readiness for the freshets of spring, in snow four to six feet deep. We have a body of railroad engineers and contractors who have gained their professional and practical knowledge in these snow regions, and who know that the obstacles which have been apprehended from snow have all disappeared in the light of experience. It is not the snow of your mountains in the interior. Even if it should reach a depth of from six to eight feet, that will be no obstruction to the passage of cars, for by raising your road bed and using the plow you throw it off without difficulty. The snow comes not in single falls, but in successive falls, and there will be no difficulty in keeping the track clear. On the seaboard the snow, when followed by rain, and the weather suddenly turns cold, freezing the sleet to the railroad, does sometimes furnish an obstruction that may require days to overcome. If I were asked where I should expect the most difficulty from snow in the whole country, from the Atlantic to the Pacific, I should say the first ten miles from the Atlantic ports. I can not say this for the Pacific ports, for there snow is seldom seen, and when it does fall, it disappears in a short time.

I shall, therefore, assume that this route is entirely practicable so far as regards the cold and snows, and I pass on to a more detailed view of its characters and of its relation to other routes. I will present it as a good route for emigrants by the ordinary conveyances of the country. The distance from St. Paul and the western end of Lake Superior to the shores of Puget's Sound is, in round numbers, 1,800 miles. Well, the difficulties which I have presented in the way of

a railroad interfered with the carrying of the mails on this route the entire year. I think, sir, that not only ought the mails to be carried over this route the entire year, but in a limited number of days. The service ought to be rendered on this road in wagons in eighteen days, which would be only 100 miles a day.

Is it not astonishing, Mr. President, that I have to go into Siberia to get facts to establish this conclusion of mine. I trust, sir, that because they are so far fetched you will not call this a Siberian trail. Russia, in the matter of her enterprises for carrying the mails, is ahead of any power in the world, and she can give us lessons that it will be well for us to profit by.

Our Consul at the Amoor, Mr. Collins, has given us the facts of the great postal service of Russia, from Moscow to Irkoutsk, in Eastern Siberia. The distance is not 1,800, but 3,426 miles. On this route are established two hundred and ten stations, with a postmaster and the necessary relays of horses at each station. The contractors are obliged to carry the mails twice a week, and they are also obliged to transport passengers over the route at certain rates of travel—to wit, at eight miles an hour in winter, six and two-thirds in summer, and five and one-third in the fall.

The time required to carry the mails over the entire route is from twenty-five to thirty days, a distance on the average of from 112 to 137 miles per day, while the government couriers go over the route in from fifteen to twenty days, or at an average of from 171 to 228 miles per day. The mail route is between the fifty-second and fifty-eighth parallels, and the thermometer in winter on a large portion of it is habitually below zero. At Moscow, the eastern terminus of the route, the average of the thermometer is 15 degrees, and at Tobolsk $1\frac{1}{2}$ degrees above zero, while at Tomsk it is three degrees, and at Irkoutsk one degree below zero. The average temperatures for January, for the three latter places were, respectively, three, five and six degrees below zero. Mr. Collins himself traveled over this entire route in winter and early spring, making such rates of travel as these. He traveled from Veick-neo-dinsk to Chetah, 300 miles, in forty-five hours; and from Irkoutsk to Kyrackta, 367 miles, in forty-eight hours. But he mentions another fact more significant still. On this distance of 3,426 miles, between the parallels of 52 deg. and 58 deg., the thermometer on a large portion of it through the winter below zero, he found 500 cities, villages and towns, showing conclusively that the extreme cold presented no difficulty in the way of the occupation of the country. This has all been done by imperial edicts acting on a nation of serfs—done simply in obedience to the idea of reverence to authority. What will not the genius and enterprise of freemen and citizens do on any of our overland routes when the government comes forward and establishes its mail service, and the contractor is not tampered by petty and exacting restrictions, and our people are left free, each man to carve out his fortune and his home? The Czar of Russia established his route, and in part builds up his towns and villages and cities with his prisoners of State, and the refuse of his jails; whereas, in our case, it will be the very flower and substance of our people who will apply the energies of freemen and of sovereigns to the building up of our routes. I have, therefore, a right to assume in the light of the ex-

perience of the great mail services of Siberia, that there will be no difficulty on our, comparatively speaking, much milder and shorter route.

On motion Mr. Hiram Barney, a vote of thanks was tendered Mr. Stevens for his admirable lecture, and request made that he deliver it again in this city. The meeting then adjourned.—*N. Y. Herald.*

[Opinions of the Press.]

THE PACIFIC RAILROAD.

We trust this recommendation will take a practical shape, and that it will be heartily responded to by Congress. To bring Saint Louis within a week's journey of San Francisco, and thus reduce by three-fourths the cost of conveying men, munitions and mails between the East and the West, is a national necessity, which ought to be promptly recognized and satisfied. Had such a railroad existed throughout the last ten years, California would have had at least one million white inhabitants by this time, and San Francisco not less than One Hundred Thousand. Our Pacific and Utah mails need not have cost nearly so much as they have done, while producing ten-fold the amount actually realized therefrom. The cost of the Utah Expedition might have been saved altogether, but it could not, at the worst, have been one-half the amount actually expended thereon. So, with regard to our costly and discreditable Indian wars on the Columbia and throughout the interior. We hold it demonstrable that a Pacific Railroad will prove a measure of National economy, while it would add more to the power, wealth and importance of our country, than the annexation of all the West Indies.—*N. Y. Tribune.*

It is supposed that the project of a railroad from the Mississippi to the Pacific will engage the attention of the approaching session of Congress, and that it will also elicit some marked allusion in the forthcoming message of the President. The matter has been talked about ever since California entered the sisterhood of States. The necessity for direct and expeditious communication between the Atlantic and Pacific States, upon our own soil, and under our own jurisdiction, has been universally acknowledged. The most inflexible opponents of internal improvements by the General Government have yielded a little of their obstinate opposition to this measure, and agree that the extension of federal aid to such an undertaking is allowable as a means of enhancing the value of our public lands, and of bringing them more speedily into market.—*Balt. Clipper, Dec. 3.*

A bill is in course of preparation looking to the construction of a Pacific Railroad. It will be presented early in the session, and pressed by all the Southwestern, Northwestern, and Pacific coast interests as the only tangible method of deciding the questions of routes and capital. It will provide for equal grants of assistance per mile, in money, lands and mail contracts; to three different routes, upon the construction and equipment of certain sections of the line. This arrangement, it is contended, will divest the question of all sectional and local difficulties, and leave to private capital and enterprise the selection of the most practicable route. Past experience has demonstrated that it is impossible to pass any bill through Congress, designating any particular route, owing to the difference of opinion existing among the members as to

the superior characteristics of this or that line. All may unite in the opinion that a road is necessary—that government may and should render liberal aid in its construction upon military and defensive considerations, and in view of the facilities it would afford for the transportation of the mails, and munitions and stores, and they may also agree to throw the disturbing elements of routes open to the competition of private capital. While the explorations which have been made thus far have resulted in the raising up of partisans favorable to all the routes, they are not entitled to the distinction of surveys sufficiently minute to demonstrate the superiority of one route above all others. Believing this or that line the best is no evidence of its practicability, neither will such belief induce the investment of capital for its construction without such minute and detailed surveys as shall afford a basis for reliable or approximate estimates as to its probable cost. But if Congress shall pass a bill offering such inducements to the investment of capital in case of success as will guarantee a reasonable profit upon the investment when the road is finished, there may be some hopes of accurate surveys being made.

Our present mail contracts for transportation of matter between the Atlantic and Pacific amount to over a million per annum, while the cost of transportation of troops and stores far exceeds that sum. The success of the overland mails has given great impetus to the railway sentiment, and it is believed that the time has arrived for Congress to make some definite offer which will stimulate the action of capitalists in the gigantic undertaking.—*N. Y. Herald.*

At an election of the Directors of the Buffalo, New York & Erie R. R. Co., held on the 7th inst., the following persons were elected Directors for the ensuing year:—A. D. Patchin, Chas. G. Miller, Geo. W. Tift, Henry Martin, G. R. Wilson, Buffalo; Daniel W. Tomlinson, Batavia; Augustus P. Hascall, Le Roy; Thomas Brown, Caledonia; John Arnot, Elmira; James G. King, George Briggs, Wm. Whiteright, Jr., N. Y.

At a meeting of the newly elected Board, the following gentlemen were chosen officers:

President.—A. D. PATCHIN.
Vice-President.—GEO. BRIGGS.
Treasurer.—GILBERT CAMERON.
Secretary.—WM. F. MILLER.

The Albany Journal says: "That canal navigation for the present season is concluded is beyond question, for the ice in it is strong enough for persons to walk upon it with safety. We learn that at various points the transhipment of property from boats to cars has already been commenced, and that the great bulk will ere long be brought to this market."

The Ohio roads are doing better. The Cincinnati Gazette gives the following examples of their gross receipts last month:

	1857.	1858.
Cleveland, Columbus & Cin'ti.	\$100,523	\$103,676
Cleveland & Mahoning	18,925	26,785
Pittsburgh, Ft. W. & Chicago	160,440	153,513
Toledo, Wabash & Western	71,366	90,436
Cin'ti Hamilton & Dayton	30,132	43,211
Little Miami	12,668	108,699
Aggregate	\$48,014	\$578,908
Increase		20 per cent.

RAILROAD DECISION.

ALLEGHANY COUNTY RAILROAD BONDS.

WOODWARD, J.—The County of Alleghany, though not strictly a municipal corporation, because it possesses within itself no legislative power, is, nevertheless, a body politic, with many corporate powers. It has a common seal—is capable of contracting—of taking and holding property, real and personal, suing and being sued.

Its corporate powers, says our Act of April 15th, 1834, shall be exercised by the County Commissioners. The building of railroads outside of the county was never germane to the purposes of the institution, nor within its general corporate powers. But the county was capable of accepting such augmentation of its powers, at the hands of the Legislature, as would enable it to assist outside railroads. Whether the Legislature might constitutionally confer such power is another question which will be noticed hereafter, but assuming for the present the right of the Legislature to grant them, the capacity of the county to accept and exercise them can not be reasonably doubted. For, he it remembered counties are creations of the Legislature, and the powers with which the creature shall be endowed must be referred to the same absolute will that brings the creature into being. If the creator does not possess powers to bestow, that is one thing, but possessing them, they are bestowed, there is an end of the question as to the right to exercise them.

Empowered to subscribe to the capital stock of the Pittsburgh and Steubenville Railroad Company and the subscription made in accordance with the legislative will, no contract could be more obligatory. The authorized mode of making the subscription good was by the issue of such certificates of loan or bond as the relator holds. The respondents do not deny that the certificates or bonds were ascertained and delivered in satisfaction of the subscription. The county has got the stock, which was the consideration of the subscription. The certificates or bonds, on the face of them, pledge "the faith, credit, and property of the county" for the payment of both principal and interest. The pledge is absolute for the interest as for the principal. It was a public loan, on the faith of the public credit. Such loans are common, not only on the part of our General and State Governments, but among all organized States of the civilized world, and there is no sentiment on which mankind are more united than on the inviolability of such public pledges. And the sentiment is very sound, for repudiation of public obligations is sure to be followed by social disorders and general decay of private morals. A pledge of the public faith ranks as an imperative obligation, because no action at law ordinarily lies to enforce it. The State or community may furnish a qualified remedy against itself, but unless it do so the contract is remediless.

Every thing beyond this must be referred to the arbitrament of the sword. But, because ordinary remedies are lacking, the obligation is considered all the more sacred. In the revolution of governments, whatever dynasty goes up or down, the public debt remains, and is always recognized by the existing government. *The strongest State of Europe is not strong enough to repudiate her debt. The weakest and most contemptible is not less bound.*

The condition prescribed by the Act of 1853, was a rule to the Railroad Company. They were not to dispose of the county bonds at less than par and the county might have restrained them by injunction from doing so, as several counties have lately done. But she stood by in silence, and suffered them to be disposed of without notice to the public, remonstrance to the Company, or appeal to the Courts.

Under these circumstances the question arises—Is she bound to provide for the interest? We unhesitatingly answer—YES, SHE IS.

The bonds were a marketable article—they were made for the markets of such securities—and the county, having permitted the Company to put them into the old market, and still allowing them to stand before the world as genuine pledges of the faith of the county, unquestioned and as if unquestionable, it is the plainest of all dictates, whether of morals or of law, that she should provide for the accrued and the accruing interest. *To this extent her obligation is at present one and imperative. She can not neglect, postpone or repudiate it, without stain on her good name more dark than the smoke of her industry.*

Notwithstanding all this, alleged in the pleas under consideration, we hold the Commissioners bound to do what the Relator calls on them to do, and we will not allow ourselves to doubt that it will be done cheerfully and effectually, without the exigency of a peremptory writ. If, however, we are mistaken in this conviction, if the Commissioners shall deliberately resolve to impair the character of the industrious, thrifty and respectable community whom they represent, they must expect the law to exhaust its powers to bring them to a better mind.

But whilst we thus overrule the third plea, we do not underrate the importance of the facts therein alleged. And we will not hesitate, in a case of so much public concern, to express ourselves freely in respect to them without intending, however, to commit the judgment of the Court on any further question that may arise.

We regard the allegation in that plea, if susceptible of proof, as possible ground for an equitable defealcation on behalf of the county against the principal of the debt.

Let us contemplate them a little in this aspect. The stipulation that the bonds should be held at par was

not unreasonable. It was a becoming expression of confidence in the faith and ability of the county, and was calculated to repress those scandalous speculations of stock jobbers, which are a disgrace to our generation, and which have ruined many a meritorious enterprise. The county had a right to contract that condition. She pledged her faith on no other. She did not say she would pay the bonds, whatever they sold at, but if they were transferred before the 8th of April, 1853, her language was that she would pay them if the purchaser paid the company their par value. If transferred after that date, her language was that she would pay them if the company received from the purchaser 75 cents on the dollar. Such was the contract, and nothing more can be made of it. And every holder and receiver of the bonds had notice, at least of the first condition, for there, on the face of the bond, it was plainly said, it "was given in pursuance of the Act of Assembly of 24th of April, 1853." That Act was a public law, of which brokers and their customers were bound to take notice as well as other people. In the bond there was express reference to the Act, and in the Act the same condition was expressed in unmistakable English.

The object of the Legislature and of the county, was to promote the building of a railroad down the valley of the Ohio, which should remedy the inconveniences that droughts and frosts occasion to the river navigation, and open a steady outlet for the immense productions of the county to the great markets of the South and West. It was not a scheme of madness or of folly, but a national conception, and worthy of the helping hand which the county proposed to lend it. Speculators should have taken notice of these things, and should have heeded the legislative guards which were thrown around the undertaking.

Suppose a father, willing to help a son in business, lends him his credit, in any form of paper, that is not strictly negotiable, but stipulates on the face of it that the son shall not sell it at less than par, and then stands by and sees him sell it at a ruinous discount, without objection. Is there any doubt that, in courts of law, the father would be held to pay the paper, principal and interest, according to its tenor? I think he would be a bold lawyer who would deny it.

But suppose a father should go into a Court of Equity, and show the violation of the condition under which he contracted, and offer to pay or renew his paper for the actual amount the son had received, would not a chancellor hear him?

This is a question which we are not to decide now, for it is not raised. Perhaps it never will be. But should the County Commissioners arouse themselves from unworthy dreams of repudiation, and bring the railroad company and holders of these bonds to an account in a Court of Equity, and establish the fact that the bonds were disposed of for less money than the law enjoined, it would be a subject of very serious consideration whether the county ought to be required to provide for them, or pay beyond the sums actually received by the railroad company. Why should she?

In seeking equity she would be obliged to do equity, but would it not be equitable to have her obligations canceled upon restoring to the unlawful purchaser the money he had paid? What more could such a purchaser in good conscience claim? May he compel the county, against the tenor of her bond, to pay for that which neither she nor her beneficiary received? On what principle? The negotiability of the bonds? They are not negotiable instruments, within the law merchant. The seal spots this plea. Nor did we treat them as such, in *Carre vs. Le Fevre*, 3d Casey, 413. The bonds in that case were not county bonds, but bonds of a private corporation, and the point ruled was that, when payable to bearer, they passed by delivery and carried with them the right of action in the name of the receiver. But no principle or decision, that I am aware of, would necessarily exclude an equitable defence to such a debt as this—especially if the purchaser is affected by circumstances of notice.

Or will it be said that having enforced payment of the interest, the principal must be enforced, of course? As well might it be argued that the law having adjudged the right, equity is incapable of restraining or modifying the remedy—a thing which it is the frequent office of equity to do. To restrain proceedings at law is one of the largest heads of equity jurisprudence.

The Relator, standing in a court of strict law, demands the interest that is nominated in his bond. However he acquired his bonds, he is the "bearer," and as such has a right to demand the interest. The Commissioners tender an equitable defence, but we tell them this is not the time or place to bring it forward. As long as they leave the body of the securities outstanding and unquestioned, they are incapable of making the defence upon the incidents. Equity, even, would not deal with such a defence, where the suit was only for interest; much less the law. But let the whole case be brought into equity, and it will be found that even-handed justice will require the County to make a new security for the sums actually received by the Company, payable in 1855, with semi-annual interest, and the holders of the bonds to surrender their bonds for cancellation on receiving that new security. Whatever interest is paid meanwhile will easily admit of equitable adjustment, when the final account comes.

If this freshdawning of a possible remedy lead to action on the part of the county, she will not be at any loss for parties to sue, for the Railroad Company is at hand, and every owner of bonds will become known as his semi-annual interest is paid at the County Treasury.

But, if the County means to take no effectual action

for her relief—if she will drive her creditors to sheer law, by refusing all performances of her promises, she must be judged by the law. Upon the law the defence proposed can not be sustained.

DETROIT AND MILWAUKEE RAILROAD.—A report has just been made by Mr. Brydges, President of the Detroit and Milwaukee Road, to the stockholders of that Road, which exhibits its affairs in vastly improved condition, compared with that of eighteen months since. Then the credit of the Company was entirely prostrated, its mortgage interest in default, its workmen unpaid, its notes under protest, and the work on the line suspended. The amount needed to clear the Company from embarrassments and complete the line was \$2,708,000. The credit of the Company was so utterly broken that the first mortgage bonds could not be sold at any price. In this dilemma the Company opened negotiations with the Great Western Railroad Company of Canada, to which the Detroit and Milwaukee is a very valuable tributary. The entire control of the Road was offered to the Great Western Company, and the best security the Detroit Road had (a third mortgage), was tendered for the needed aid. The negotiations were successful, and the road passed under the management of the Great Western. By the aid rendered by this latter corporation, and that obtained from other sources, the road has been completed to the Lake at Grand Haven, and the floating indebtedness of the Company reduced to \$692,794, most of which is not until 1860, and the amount of absolutely overdue debt to less than \$50,000, and the annual interest is \$454,870, requiring an annual gross traffic of about \$910,000, or \$17,500 per week. Although the road has been opened but a short time the traffic, in its undeveloped state, has reached an average of over \$11,000 per week. Two sea-going steamers are being built for crossing Lake Michigan to Milwaukee, to be ready next Summer. Mr. Brydges congratulates the stockholders upon the flattering prospects of the Company, and states that time only is needed to bring a fair return for the capital they have invested.

MONETARY AND COMMERCIAL.

In money matters, things are evidently easier than they were two weeks ago, but this week being tax paying week, there is a little brisker demand than during the few days previous. Saturday is the last day of grace on tax, and the payments during the latter half of this week will be heavy. The new feature of dividing the taxes, and making one half payable in June, has a considerable influence in giving ease in financial matters, this is particularly so in Cincinnati, where so large an amount of capital is drawn off at this season in the Pork and Sugar trade.

In Exchange there has been quite a falling off in the supply, but no change in rates. New Orleans is scarce.

For three weeks ending Dec. 2d, the Pennsylvania Central road earned.....\$302,499 33
Same time 1857.....173,063 52

Increase.....\$29,445 81

PAYMENTS.

Transportation expenses, viz:
Passenger business.....\$1,610,863 19
Freight business.....1,876,429 28

Interest, including interest on debt certificates held for sinking fund.....\$976,192 18
Sinking funds.....113,794 38

Dividends, viz.
Feb. 1858, 4 per cent.....\$939,782 00
Aug. 1858, 4 per cent.....939,782 00

Transportation expenses for the year ending Sept. 30th, 1858, 53.42 per cent of the gross earnings for the same period.

Net earnings, \$1,951,633 67, equal to 8.134 per cent., on the amount of the capital stock of the Company upon which dividends are payable.

GROSS RECEIPTS FROM THE PUBLIC WORKS OF OHIO, FOR 1858, COMPARED WITH THOSE OF 1857.

The appended Table shows the gross receipts from the Public Works of Ohio, for 1858, together with a comparison of the gross receipts for 1857, as shown by returns to the Office of the State Auditor:

OHIO CANAL.		
	1857.	1858.
Cleveland.....	\$24,617 47	\$20,649 87
Akron.....	35,919 72	26,891 49
Massillon.....	10,472 21	7,245 98
Dover.....	11,613 43	6,240 35
Roscoe.....	4,073 23	3,807 77
Dresden.....	4,696 32	4,214 40
Zanesville.....	268 82	106 54
Newark.....	5,336 35	4,919 01
Carroll.....	11,779 53	8,985 01
Columbus.....	5,374 41	4,918 94
Circleville.....	9,966 61	5,572 59
Chillicothe.....	23,074 16	15,608 92
Portsmouth.....	8,744 94	4,130 59
Total.....	\$156,207 28	\$112,391 37

WALHONDING CANAL.		
Roscoe.....	\$268 54	\$645 07

MUSKINGUM IMPROVEMENT.		
Dresden.....	\$771 60	\$646 52
Zanesville.....	5,615 99	5,665 10
McConnellsville.....	5,892 16	6,990 83
Harmar.....	6,698 16	6,292 53
Total.....	\$18,907 01	\$19,584 98

MIAMI AND ERIE CANAL.		
Cincinnati.....	\$27,632 68	\$27,461 73
Hamilton.....	3,907 73	4,269 52
Middletown.....	9,956 08	8,187 83
Dayton.....	17,068 08	14,574 24
Piqua.....	20,778 90	22,330 31
St. Mary's.....	7,290 54	8,608 41
Delphos.....	9,092 52	8,272 21
Defiance.....	30,772 25	4,716 09
Maumee City.....	3,889 58	36,851 62
Toledo.....	25,532 54	23,595 80
Total.....	\$155,040 90	\$158,491 76

HOCKING CANAL.		
Carroll.....	\$2,425 39	\$2,229 90
Logan.....	15,823 58	15,300 77
Total.....	\$18,248 97	\$17,530 67

RECAPITULATION.		
Ohio Canal.....	\$146,207 28	\$112,391 37
Walhonding.....	268 54	645 07
Muskingum Improvement.....	18,907 01	19,584 98
Hocking Canal.....	18,218 97	17,530 67
Miami and Erie.....	155,040 90	158,491 76
Total.....	\$348,672 70	\$308,643 85

THE RESULTS.

The returns show a decrease of gross receipts for 1858, compared with 1857, of \$40,028 85. An increase is shown for the following Canals, viz: Miami & Erie, \$3,450 86; Walhonding, \$376 53, and Muskingum Improvement, \$677 97. The remainder exhibit a decrease, as follows: Ohio Canal, \$43,815 91; Hocking Canal, \$714 30. The deficit was almost wholly in the Ohio Canal. The list of expenditures is not yet completed, but the aggregate is likely to fall very considerably below those of 1857, repairs having been made under an economical system.

The November business of the Hudson River road shows a very encouraging result. The figures are: Receipts, November, 1858.....\$17,094 50
Receipts, November, 1857.....121,382 44

Increase.....	\$15,812 06
Expenses—decrease in Nov., 1858, compared with 1857.....	14,443 35
Increased net profits.....	\$30,255 41

The receipts of the New York and New Haven Railroad for November were as follows:		
Passengers.....	\$80,067 11	
Freight.....	13,000 00	
Total.....	\$93,067 11	
Due other roads.....	22,869 17	
For November, 1857.....	\$70,197 94	
For November, 1858.....	58,401 12	
Increase.....	\$11,796 82	

The official report of the New York Central road has been distributed and shows the following result for the year ending Sept. 30th, 1858:

	SUMMARY OF TRANSPORTATION EXPENSES.		
	Passenger Transp'n.	Freight Transp'n.	
Maintaining road-way and real estate.....	\$1,114,294 55	\$529,289 94	\$535,004 61
Repairs of machinery.....	571,326 32	264,394 45	206,931 87
Operating the road.....	1,801,671 60	617,178 80	924,492 80
Total.....	\$3,487,292 47	\$1,610,863 19	\$1,876,429 28

RECEIPTS.		
Passengers.....	\$2,532 646 55	
Freights.....	3,700,270 44	
Other sources.....	29,495 71	
Total.....	\$6,522,412 70	

DINSMORE'S PUBLICATIONS.

RAILROAD GUIDE AND ROUTE-BOOK (established in 1850.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated.

Four Numbers 10 cents each.

No. 5.—Tricks and Traps of Horse Dealers. By "Frank Forester." 10 cents. Now ready.

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No. 7.—On Courtship and Marriage. (In preparation.)

No. 8.—Tricks and Traps of Chicago. Now ready.

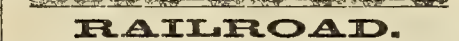
No. 9.—Tricks and Traps of Chicago. (In preparation.)

Ten cents per number. All sent free by Mail, (Peddlers supplied at a great discount.)

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9 Spruce Street, New York.

Winter Arrangement.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Beahwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily, at 12:20 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l. Western Agent.
L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS, in general or detail of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c.

Particular attention given to the superintending of LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description, While under construction.

AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK, Also, for Water Gauges, Indicators, Steam Whistler CHAS. W. COPELAND, Consulting Engineer, 64 Broadway, N. Y.

DAVENPORT.....M. D. WELLMAN.....C. M. RUSSELL

DAVENPORT, RUSSELL & CO., Railway Car Manufacturers, MASSILLON, OHIO.

THE subscriber, late of the firm of Davenport, Bridges & Co., Fitchburg, Mass., having associated himself with Messrs. Wellman and Russell, under the above name, would respectfully solicit calls for any kind of Passenger, Baggage, Post Office, Freight, Coal, Gravel or Hand Cars.

Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Oak with which we think we can build Cars as cheap and as well as any other establishment in the State.

Feb. 161* JOSEPH DAVENPORT.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 228 H Street, Washington, D. C. april2

ALLEN & NOYES' METALLIC PACKING.

To Whom it May Concern.

NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. His power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857. jr23-1m

TO THE STOCKHOLDERS OF THE SOUTHERN PACIFIC R. R. CO.

We, the undersigned, having been appointed a Committee to carry out the plan adopted by the recent meeting of Stockholders at Louisville to relieve your Company from its present embarrassment and impending ruin, beg leave to call your immediate and earnest attention to the following facts.

By the terms of the Compromise effected with the so called "New Company," it becomes necessary that the entire amount of our indebtedness to them be paid off at once!

To meet this payment it is required that each and every Stockholder comply with one of the three following propositions:

1st. Every holder of Stock not fully paid, must make immediate payment of the entire balance required to bring his Stock up to Five Dollars per Share.

2nd. Every holder of full paid Stock must advance as a loan to be returned with interest, the sum of Fifty Cents on each Share of Stock so held.

3d. Any holder of full paid Stock, who prefers, may surrender one half his Stock to the Company, instead of loaning the Fifty Cents as above.

We deem it absolutely necessary that every Stockholder, who wishes to retain his interest in the Company and to share in its brilliant, and we trust soon to be realized, future, must make immediate response to this call, and pay over to either of the undersigned, on or before the Tenth day of December.

Every Stockholder, who fails to respond to this call by the time designated, will most certainly lose his entire investment; therefore we say to one and all attend to this matter NOW.

J. M. CONWELL, 65 and 67 West Front Street.

JOHN TAIT, 25 Walnut Street.

M. F. CRIGLER, s. w. cor. Pearl and Sycamore.

Committee,
Cincinnati, November 30, 1858.

Louisville, Ky., November 27th, 1858.

MESSRS. CONWELL, TAIT & CRIGLER, Committee, etc.

GENTLEMEN:—We need the unanimity and united effort of all of our stockholders, and especially of those of Ohio. You know all the facts, the feeling and disposition of the Convention here, and I, by virtue of the authority given me by Stockholders and by Directors, etc., hereby fully empower you, to do all and everything to meet the exigency, which must be met. Justice full—with the utmost liberality in our power shall be extended, to every stockholder, and those who act as recommended, can and will be protected. I can not doubt. The views and the wishes of your stockholders shall and will be regarded and most fully met. Ohio is entitled to and will have a Director at our next election. Receive instalments from all and every holder of Stock Certificates—as we desire that every Stockholder shall be secured to all and every right ever possessed.

Very respectfully,

JEPHIA FOWLKES, President,
Southern Pacific R. R. Co.

BALTIMORE AND OHIO RAILROAD.

GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK AND BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

9 A. M. and 11:00 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:25 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire or Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:30 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK AND BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

Terre Haute & Richmond R. R.

Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

E. J. PECK,
Sup't Terre Haute & Richmond R. R.

PAGE'S

PATENT PORTABLE CIRCULAR S-W MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Hatchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Shingle Machines, &c.

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LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY MAY 10TH
1858. Trains leave Cincinnati Daily, Sunday excepted.

6 A. M. EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

10 A. M. MAIL—Stopping at all stations.

5 P. M. ACCOMMODATION—Stopping at all stations.

10.15 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Xenia, London and West Jefferson.

Connections are Made by the 6 A. M., 10 A. M., and 10.15 P. M. Trains for

ALL THE EASTERN CITIES.

To Cleveland, Wheeling and Pittsburgh, without change of Cars

FOR THROUGH TICKETS

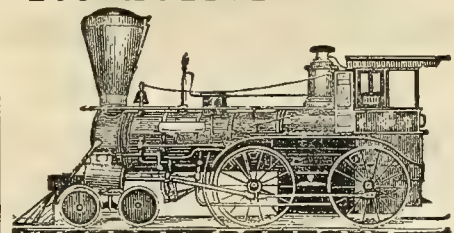
And information, apply at Union Office, No. 2 Burnet House, south-east corner Broadway and Front streets, and at the Depot.

Trains run by Columbus time, which is seven minute faster than Cincinnati time.

J. DURAND, Sup't.

E. F. FULLER, General Ticket Agent. my13

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The undersigned are prepared to furnish Locomotives equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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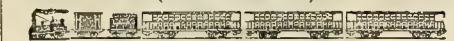
MOORE & RICHARDSON.

1858 CINCINNATI AND ST. LOUIS.

Through without Change of Cars,

OHIO & MISSISSIPPI

(BROAD GAUGE)



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Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union office, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

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MIDDLETON, STROBRIDGE & CO.,
119 Walnut st., Odd Fellows' Building
Jan 8-ly

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express.

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains east and west; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 3:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cuyahoga for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky with C. & P. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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Power Mortising Machines,

ROTARY MORTISING MACHINES, TENON MACHINES, Chair Seat Machines, Boring Machines, Scroll, Chair-back and Swing Saws, Concave Fellow Saws, Saw Mandrels, Turning Lathes, Dental Lat Screw Cutters, Lithograph and Tincture Presses.

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PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

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KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

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ANDERSON, GATES & WRIGHT,
(Successors to Jacob Earnst.)
112, Main Street, Cincinnati

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SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN, Supt. Aug. 14

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THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

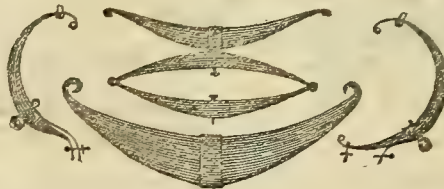
For plans, or reference from fifty-eight different railroads in the United States and Canada, please address
Respectfully Yours,

D. M. CARHART,
Box 183, Cleveland, Ohio.

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Mathematical Instrument Makers
Removed to No. 67 West 6th St.
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MCDANIEL & HORNER, LOCOMOTIVE AND CAR MOTIVE SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDISH IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

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A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19

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EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

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BUSH & LOBDELL,
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CHILLED WHEELS

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TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE.
WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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WILMINGTON, DELAWARE,



Manufacturers of all kinds of Railroad
MACHINERY.

PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

From our long experience in car-building, and our facilities for doing work, we are enabled to give entire satisfaction in every particular.

From our location and conveniences for shipment we can supply Southern roads with dispatch, and ship at reasonable heights.

We are also extensively engaged in building Iron Vessels and Iron Steamboats, Steam Engines, and Boilers, and Machine Work in general. All orders executed with dispatch, and on reasonable terms. 2c

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SOLICITOR OF PATENTS,
And Consulting Engineer,

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1000 TONS Railroad Iron, weighing about lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

Feb. 1858.

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Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
July 30 No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

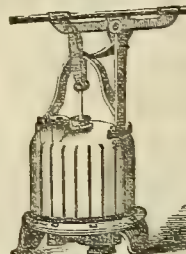
172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action
SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

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SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—Jy

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, DEC 23, 1878.

Railroad Record

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TENNESSEE RAILROADS.

The road commissioner of Tennessee states that there will be more iron laid in Tennessee this year than has ever been laid in any one year, viz:

The East Tenn. and Virginia Road has laid	27 miles
The Cleveland and Chattanooga will lay	30
In East Tennessee	57
Winchester and Alabama	15
Tennessee and Alabama	15
Louisville and Nashville	30
Edgefield and Kentucky	30
In Middle Tennessee	90
Mobile and Ohio will lay	60
Memphis and Ohio will lay	25
In West Tennessee	85
Total in the State	232

There are now in active operation in Tennessee, 679 miles of railroad. By the 1st of January next, there will be 875 miles running; and January, 1860, the number of miles in active operation will be 1,146.

☞ We call the attention of Railroad men to the Advertisement of the Schenectady Locomotive Works, in another column. Those in want of locomotives of the 4 feet 10 inch gauge, can be promptly supplied.

PROSPECTS OF THE SOUTHERN PACIFIC ROAD—BRITISH PLAN.

Our readers well know what we think of the great Southern Line of Railroad to the Pacific, under the Texas Grants. We have advocated it, as *useful work*, no matter in whose hands, provided it was successfully accomplished. We have held that it *could* be accomplished under the grant of Texas; and if it was, it would be a gigantic speculation to the holders of the stock. These have been our opinions, and we have not abandoned them. In the main, we hold them yet; but, in the mean time, the fortunes of the Company have undergone many changes; and its safety is not yet wholly insured; but we think a brighter day has dawned upon it, and that it will soon emerge from any and all clouds. The managers of the Company, as our readers know, were at first located in New York, where the office of the Company was. They made great efforts, and succeeded at last in putting the work on a practicable basis, by renewing the Texas legislation, and contracting with a company, and commencing the work. This was a good deal; for the plan was then beset with all manner of difficulties. But, as in other cases, a local jealousy arose in Texas, and the Company not being able to pay up the contractors fully, fell in debt, and finally to appease all parties, a New Orleans Company became the managers. How grievously that Company disappointed all parties, and how the enterprise fell into disrepute in their hands, is well known. The series of misfortunes was finally completed, by what was called a *sale*! Had this sale been legal, or supposed to stand, the entire stock of the original proprietors would have been forfeited, and they who had labored, and risked much for the road, been totally disappointed. Fortunately, it was ascertained the sale was *not* legal. A new set of managers was chosen, of whom Dr. FOWLER was elected President. The Company owes much to the indefatigable exertions of this gentleman. He proceeded to take advice on the *legality* of the sale; and finally a compromise was made, by which the purchasers give up the road, on the payment of certain sums. Recent meetings of the stockholders have been had, by which a large portion of the money required has been obtained. As we understand the matter, there is little or no doubt the conditions of the new arrangement will be fulfilled, and the road pass into the hands of the Company. If so, then we consider the road and its success, *secure*. Then, there will be carried out a plan and work, which will be unequalled in this country, and which offers to the stockholders the highest reward of successful enterprise.—For, twenty-five miles of the road are, we understand, completed, thus enabling the Company to demand 250,000 acres of land. This land can not be counted as worth less

(if well selected) than \$800,000. With this twenty-five miles more may be completed, *without any demand on the Stockholders*. In this manner, seven hundred miles of road will be made—its value increasing at each step. One of the great and interesting points is, that the road *will make its own business*, as it goes. Beginning on the western border of Louisiana, in a good country, as soon as its lands are selected, and the facilities of transportation afforded, all the vacant land will be settled, and a population and business furnished the road. Thus it will proceed to the Rio Grande. If it were to stop there, the Company need derive no better investment. But, it will not stop there. Arizona, as it is called, already has several thousand inhabitants, and the mines are being fast developed. The road will no sooner reach the West Line of Texas, than either the Government, the Territory, or speculators will make the road to the Gila, and then it will find navigable water to the Gulf of California. It can afford to stop there? But will California allow it? Not at all; the work will be carried on to the Pacific.

In speaking favorably of this grand route, which has every element of a successful enterprise, we say nothing against a Northern Railroad. On the contrary, we know there must be a Road to the north; quite probably in the British Dominion, whose termination will be in the Straits of Tuca. In order that the friends of the Texas Pacific may know what is going on, we note briefly something which is done, by the British authorities. The Assembly of Canada ordered a survey in 1857, which has been completed. This survey represents not only the road, as practicable, but the climate so mild, as to offer little obstruction. Further proceedings are thus noticed, in a valuable pamphlet published by Mr. Charles C. Coffin, in Boston:

“The English government is taking efficient steps to forward the project. A corps of the Royal Engineers has been sent out. The *London Times* says:

The detachment is composed of picked volunteers, and embraces almost every trade and profession—surveyors, draftsmen, engravers, artists, architects, photographers, carpenters, masons, blacksmiths, painters, miners, etc., such as only the Royal Engineers can produce. Steam engines, railway rails, and other mechanical appliances, either for steam or water power, will be sent after the party.

“But one conclusion is to be drawn from all this—that England is using strenuous efforts to secure the greatest prize of all time.

“A company (Nov. 16), is already organizing in London with a capital of fifty millions of dollars to be aided by a liberal grant of crown lands for the consummation of the enterprise.”

This project is quite likely to be carried

out by the British, before any road in the United States is made, unless the Southern Pacific is made. For capital can be had for British enterprizes; especially, when they offer so splendid a prize as this. But, at any rate, two Roads to the Pacific, a thousand miles apart, will in no way impede each other. On the great enterprize, as a whole, Mr. Coffin well says:

"Great events are transpiring in the world which have a direct and all important bearing on the United States. China and Japan have recently been brought in connection with the rest of the world. The five hundred millions of beings in those countries are henceforth to be reached by the hand of civilization. Russia is extending its power, its enterprise, its lines of trade and traffic eastward to the Pacific, to seek in that direction an outlet for her trade, now denied her through the Black Sea. India under British rule is throwing its lines of railway in every direction. Australia is taking the proportion of an empire, yielding a hundred million dollars in gold per annum, with unequalled agricultural resources—with a population already numbering six hundred thousand, who speak the Anglo Saxon tongue, and who are animated with ideas of progress and advancement. The Islands of the Pacific—the half-way houses of trade and travel—are feeling the vivifying influence of the time. Chili is building along her vallies and mountain peaks, railroads which shall bring the riches of the Andes to the sea. On our western shores, California, Oregon, Washington, and Vancouver are awaiting the hand of industry to yield their riches. Around and in the Pacific Ocean are the 'signs of the times.' The question arises as to the bearing of these movements on the future of the United States! There is a great commercial prize before us. What are our relations to it? Can we make it ours; or are we to see it grasped by other hands?"

GOVERNMENT EXPENSES AND REVENUES.

The following paragraph from the *N. Y. Economist* contains some valuable information, although a little one sided. The figures seem to point to a crisis in the affairs of government. There seems to be only one alternative, either to *reduce the expenses*, or, to raise the money by Direct Taxation.

The fact remains that while foreign goods are daily losing ground in this market, by reason of the rapid growth of home manufactures, and that consequently the foreign goods are less and less able to bear any tax at all. The government being dependent upon those taxes for its support it continually increasing its expenditure. In ordinary years the basis on which customs' revenues are to be cast are the exports, since what we send abroad are articles of necessity that the countries with which we deal can not dispense with. These are gold, cotton, tobacco, food for Europe; and manufactures for South America. Those

things being sold, the returns must come back into the country, not in gold, because that is what we sell, but in dutiable goods.

The exports, customs, and expenditures at different periods were as follows:

	Exports.	Customs.	Expenses.
1823....	\$47,175,408	19,088,433	15,314,171
1826....	52,499,855	22,311,331	24,163,398
1829....	49,976,132	22,641,965	25,041,358
1833....	69,950,851	29,032,569	24,254,298
1836....	106,520,942	23,401,940	30,878,164
1839....	101,625,533	23,137,924	17,614,936
1841....	103,636,296	14,487,216	31,797,530
1845....	98,455,330	27,528,112	30,490,408
1850....	136,946,912	39,668,646	44,604,718
1854....	253,399,870	64,224,191	75,473,119
1857....		61,172,301	
1858....		42,121,301	81,595,667

These figures are for the highest year of customs under each tariff down to 1854. In 1823, the customs exceeded the whole expenditure at this date. The tariff of 1824 was a "protective" tariff, and gave its largest revenue in 1826, but falling short, of the expenses, which included the annual payment then made on the public debt. The "Black Tariff" of 1828 gave its largest revenue in 1829, falling still short of the expenses. The reduced tariff of 1832 gave a large revenue in 1833, when the compromise was enacted. The revulsion of 1839, and utter loss of credit growing out of repudiation, sent the customs to a very low figure. The tariff of 1842 gave its largest revenue in 1845, since then the tariff of 1846, operating on constantly increasing exports, has greatly swollen the revenues, but gave its largest yield in 1854.

CORRESPONDENCE.

MARSHALL, Texas, Dec. 5th, 1858.

To the Editor of the Railroad Record.

SIR:—In the *Harrison Flag* I see a letter copied from your paper that I wrote to Col. Bradley, of Cincinnati, and that the editor of the *Flag* says, "that I deny being the author of the letter;" this the editor is very much mistaken in. Col. Wigfall met me on the street and said to me, "he did not know that I was writing for newspapers." I replied to him that I had not become a newspaper writer, not knowing at the time that Col. Bradley had had my letter published. I now state to you that I did write the letter, and believe that it is a true statement of things in this country as I understand them, and I do know the majority of this community are in favor of Dr. Fowkes raising the money and getting the road, for I have made it my business to find out the sentiment and feelings of this community on this subject.

I will have the statement in the *Flag* corrected next week. Respectfully,

E. C. HYSOON.

The letter referred to above, was published in the *Record* of Nov. 11.—Ed.

The annual meeting of the Stockholders of the Chicago and Milwaukee Railroad Company, which was advertised to be holden at their office in Chicago on the 14th day of December, 1858, at 10 o'clock A.M., has been postponed until Tuesday, February 8th, 1859, at 10 o'clock A.M., at which time said meeting will be holden at the office of said Company in Chicago, for the election of Directors for the ensuing year, and the transactions of such other business as may be presented.

THE POST OFFICE DEPARTMENT OF THE UNITED STATES.

Extracts of the annual report of Aaron V. Brown, Post Master General, for the year ending June 30, 1858:

NUMBER OF POST OFFICES.

The whole number of Post Offices in the United States on the 30th June last was 27,977, of which 400 are of the class denominated presidential. The number established during the last fiscal year was 2,121, and the number discontinued 730, being an increase of 1,391. The number of postmasters appointed during the year was 8,284. Of these 4,595 were to fill vacancies occasioned by resignation, 998 by removals, 278 by deaths, 292 by change of names and sites, and 2,121 on establishment of new offices. The whole number of offices on the 1st December, 1858, was 28,573.

TRANSPORTATION STATISTICS.

On the 30th June last there were in operation 8,296 mail routes. The number of contractors was 7,044.

The length of these routes is estimated at 260,603 miles, divided as follows, viz:

	Miles.
Railroad.....	24,431
Steamboat.....	17,443
Coach.....	53,709
Inferior grades.....	163,420

The total annual transportation of mails was 78,765,491 miles, costing \$7,795,418, and divided as follows:

Railroad, 25,763,452 miles, at \$2,828,301; about eleven cents a mile.

Steamboat, 4,569,610 miles, at \$1,233,916; about twenty-seven cents and two mills a mile.

Coach, 19,555,734 miles, at \$1,909,844; about nine cents and eight mills a mile.

Inferior grades, 28,876,695 miles, at \$1,823,357; about six cents and three mills a mile.

Compared with the service reported on the 30th June, 1857, there is an addition of 18,003 miles to the length of mail routes; 3,859,424 miles to the total annual transportation, being about 5.11 per cent., and of \$1,173,272 to the cost, or 17.46 per cent.

The aggregate length of railroad routes has been increased 1,901 miles, and the annual transportation thereon 1,495,508 miles; 6.05 per cent.; at a cost of \$268,454, or 10.44 per cent.

The length of steamboat routes is greater by 1,798 miles, and the annual transportation 51,491 miles, costing \$241,918 additional, or 1.10 per cent. on transportation, and 24.38 per cent. on the cost.

The addition to coach route is 4,371 miles in length, 464,804 miles in annual transportation, or 2.43 per cent., and \$499,018 in cost, or 35.37 per cent.

The additional length of inferior routes is 9,932 miles; the additional annual transportation 1,847,621 miles, and the additional cost \$163,982; being 6.83 per cent. in transportation, and 9.87 per cent. in cost.

Appended to this report is a table (marked A) showing in detail the mail service of every grade, as existing in each separate State and Territory, on the 30th June last.

Also a table (marked B) showing the increase, or decrease in the several grades of service, and their cost, in each State and Territory, during the last fiscal year, together with a detailed statement of routes on which improvements have been made and additional expense incurred.

The lettings of new contracts for the term commencing 1st July last embraced twenty-one States and Territories of the north-west, west, and south-west, including California, New Mexico, Utah, Oregon, and Washington.

The following table shows the new service, as in operation on the 30th September, including the overland mail route from St. Louis and Memphis to San Francisco, also the route from New Orleans via Tehuantepec to San Francisco:

Conveyance.	Miles in length.	Miles of annual transportation.	Cost.
Railroad.....	8,603	8,972,850	\$1,222,437
Steamboat.....	16,146	3,321,462	1,361,754
Coach.....	40,055	13,33,727	2,580,460
Interior modes.....	115,547	18,997,016	1,520,551
Total.....	180,351	45,225,035	\$6,483,210

Compared with the service on the 30th June last, the length of routes is increased 27,973 miles; the annual transportation thereon 9,026,666 miles, and the cost \$2,243,156.

Divided as follows, to-wit:

	Length.	Annual transportation.	Cost.
Railroad.....	676	867,047	\$371,168
Steamboat.....	6,291	456,590	337,559
Coach.....	11,861	5,485,943	1,288,814
Interior modes.....	9,145	2,277,483	315,616
Total increase.....	27,973	9,026,666	\$2,213,156

Appended hereto is a statement, marked —, showing the routes on which additional expense was incurred.

On the 30th June last there were in the service—

440 route agents, at a compensation of.....	\$334,750 00
28 express route agents, do.....	29,000 00
23 local agents, do.....	99,969 00
1464 mail messengers, do.....	184,634 41

Making a total of.....\$577,373 41

This amount, with the increased cost of service under new contracts commencing on the 1st July.....2,243,156 00
Added to the cost of service as in operation on the 30th June last.....7,795,418 00

Makes the total amount for the current year.....\$10,615,947 41

REVENUE AND EXPENDITURES.

The expenditures of the department in the fiscal year ending June 30, 1858, amounted to.....\$12,722,470 01

If there be added to the above \$91 90 lost by bad debts, and the sum of \$925 35 gained on the suspense account be subtracted, then the net amount of expenditures will be \$12,721,636 56, as adjusted in the Auditor's Office.

The gross revenue for the year 1858, including receipts from letter carriers and from foreign postages, amounted to \$7,486,792 86, as stated below:

Letter postage, received in money.....	\$904,299 13
Received for postage stamps and envelopes sold.....	5,700,314 03
Received for postage on newspapers and pamphlets.....	591,976 90
Received for postage for registered letters.....	28,145 16
Received for fines.....	85 00
Received on account of emoluments.....	80,644 96
Received from letter carriers.....	174,008 10
Received from dead letters unclaimed.....	3,410 66
Miscellaneous receipts.....	3,878 92
Total revenue.....	\$7,490,792 86

To the gross revenue above stated are to be added the permanent annual appropriations, amounting to \$700,000 granted to the department by the acts of March 3, 1847, and March 3, 1851, for the transportation and delivery of free mail matter for Congress and the executive departments, thus making the whole revenue of the year amount to \$8,186,792 86, which falls short of the expenditures, as adjusted on the Auditor's books, \$4,534,843 70.

I beg leave to invite attention to the full and highly satisfactory report of the Auditor, hereunto appended, and marked —. From this interesting document I derive the following brief synopsis of the financial operations of the department in the past fiscal year:

The balance standing to the credit of the department on the books of the Auditor, on the 30th June, '57, was.....	\$1,163,886 05
The receipts of the department from all sources during the year 1858, including a gain of \$925 35, on the suspense account, amounted to.....	7,487,718 21
The amount of the various appropriations drawn from the Treasury during the year was.....	4,679,270 71
Making the total of receipts.....	\$13,330,874 97
The whole amount of expenditures in the year, including \$91 90 for accounts closed by bad debts, was.....	12,722,361 91
Leaving to the credit of the department on the 1st July, 1858.....	\$608,313 06

FINANCES OF THE UNITED STATES.

REPORT OF THE SECRETARY OF THE TREASURY ON THE STATE OF THE FINANCES.

Treasury Department, December 6, 1858.

SIR:—In compliance with the act of Congress, entitled "An act supplementary to an act to establish the Treasury Department," approved May 10, 1800, I have the honor to submit the following report:

On the 1st of July 1857, being the commencement of the fiscal year, 1858, the balance in the Treasury was.....\$17,710,114 27
The receipts into the Treasury during the fiscal year, 1858, were \$70,273,869 59, as follows:

For the quarter ending September 30, 1857—	
From customs.....	\$18,573,739 37
From public lands.....	2,459,149 39
From miscellaneous sources.....	296,641 05
For the quarter ending December 31, 1857—	20,929,819 81
From customs.....	\$6,237,793 69
From public lands.....	498,781 53
From miscellaneous sources.....	356,159 78

For the quarter ending March 31, 1858—	7,092,665 00
From customs.....	\$7,127,900 69
From public lands.....	480,936 88
From miscellaneous sources.....	393,690 78
From Treasury notes issued.....	11,087,600 00

For the quarter ending June 30, 1858—	19,090,128 35
From customs.....	\$9,850,267 21
From public lands.....	474,548 07
From miscellaneous sources.....	507,741 15
From Treasury notes issued.....	12,658,700 60

The aggregate means, therefore, for the service of the fiscal year ending June 30, 1858, were.....\$87,983,983 86

The expenditures during the fiscal year ending June 30, 1858, were \$81,585,667 76, being for the quarter ending—

September 30, 1857.....	\$33,714,528 37
December 31, 1857.....	17,075,653 07
March 31, 1858.....	18,104,915 74
June 30, 1858.....	22,730,570 58
Total.....	\$81,585,667 76

Which were applied to the various branches of the public service as follows:—

Civil, foreign intercourse, and miscellaneous.....	\$36,387,692 20
Service in charge of Interior Department.....	6,051,923 38
Service in charge of War Department.....	25,485,283 60
Service in charge of Navy Department.....	13,976,000 59
Public debt and redemption of Treasury notes.....	9,684,537 99

—As shown in detail by statement No. 1.

Deducting the expenditures from the aggregate means during the fiscal year, 1858, a balance remained in the Treasury on the 1st July, 1858, of.....	\$6,398,216 10
During the first quarter of the current fiscal year, from July 1, to September 30, 1858, the receipts into the Treasury were as follows:—	
From customs.....	\$13,444,520 28
From public lands.....	421,171 84
From miscellaneous sources.....	939,957 34
From loan of 1858.....	10,000,000 00
From Treasury notes issued.....	405,200 00
Total.....	25,230,879 46

The estimated receipts during the three remaining quarters of the current fiscal year to June 30, 1859, are—

From customs.....	\$37,000,000 00
From public lands.....	1,000,000 00
From miscellaneous sources.....	500,000 00
Total.....	38,500,000 00
Estimated ordinary means for current fiscal year.....	\$50,129,195 56

The expenditures of the first quarter of the current fiscal year ending September 30, 1858, were:—

For civil, foreign intercourse, and miscellaneous services.....	\$6,392,746 38
For service in charge of Interior Department.....	1,991,264 24
For service in charge of War Department.....	8,234,490 04
For service in charge of Navy Department.....	4,086,515 48
For public debt, including redemption of Treasury notes.....	1,010,142 37
The estimated expenditures during the remaining three quarters of the current fiscal year to June 30, 1859, are.....	52,357,098 48

Ordinary means as above.....	\$74,065,898 49
Deficit of ordinary means to meet expenditures.....	70,129,195 56

The deficiency in the ordinary estimated means to meet the estimated expenditures during the remainder of the current fiscal year ending June 30, 1859, are therefore \$3,936,701 43.

There are extraordinary means within the command of the department as follows:—

Treasury notes which may be issued previous to the 1st of January, 1859, under the 10th section of the act of December 23, 1857, say.....	\$1,000,000 00
Balance of loan authorized by act of June 14, 1858.....	10,000,000 00
Which added to the ordinary estimated means.....	70,129,195 56

Makes the aggregate means to June 30, 1859.....	\$81,129,195 56
Deduct the actual and estimated expenditures as heretofore stated.....	74,065,896 99

Leaves an estimated balance in the Treasury, July 1, 1859, of.....\$7,063,298 57

Estimates for the fiscal year from July 1, 1859, to July 1, 1860.

Estimated balance in the Treasury.....	\$7,063,298 57
Estimated receipts from Customs for the fiscal year ending June 30, 1860.....	56,000,000 00
Estimated receipts from public lands.....	5,000,000 00
Estimated receipts from miscellaneous sources.....	1,000,000 00

Aggregate of means for year ending June 30, 1860.....\$69,063,298 57

Expenditures estimated as follows:—

Balance of existing appropriations.....	\$12,478,907 28
Amount of permanent and indefinite appropriations.....	8,497,724 50
Estimated appropriations to be made by law for the service of the fiscal year to June 30, 1860.....	52,162,515 68

The estimated receipts being.....\$73,129,147 46

Deficit.....\$4,075,848 89

To this estimated deficiency on the 30th June, 1860, should be added the sum of \$3,838,728, which will be required for the service of the Post Office Department during the present fiscal year. This latter amount is not taken into the foregoing estimates, but is asked for by that Department, as will appear from the letter of the Postmaster General accompanying the annual estimates.

The financial exhibit of the Michigan Southern and Northern Indiana Railroad for the month of November, shown an increase in net earnings over the corresponding month of last year, of nearly \$30,000.

The managers of the Williamsport and Elmira Railroad Company, at a meeting held on the 9th inst., unanimously decided to pay the coupons on the First Mortgage Bonds at the commencement of the new year.

REPORT OF THE SECRETARY OF INTERIOR.

The Secretary says that under the various acts of Congress of 1847, '50, '52 and '55, there have been issued 516,758 bounty land warrants, requiring 55,731,890 acres of the public domain to satisfy them. Of these, 416,632 had been located to the 30th of September last on 44,238,830 acres of land, leaving outstanding 100,136 warrants, calling for 11,493,860 acres of land.

It is confidently expected that during the next calendar year, the receipts from the sales of the public lands, and the quantities sold and located will be greatly increased. It is estimated that without some detrimental change in our system, the income from this source will reach at least \$5,000,000.

It is now satisfactorily ascertained that mines of the precious metals are to be found in the Territories of Washington, Oregon, New Mexico and Kansas, and the time has arrived for the Government of the United States to adopt some definite policy as to its mineral lands.

The Secretary, therefore, submits whether it would be a wise and sound policy at this time to pass a general law, reserving all auriferous, silver and cinnebar mines from sale, for the use and occupancy of the people of the United States, under such regulations as Congress may prescribe, and leaving those lands containing copper, iron, lead and coal subject to the ordinary laws of the settlement and sale for their development. The extent of these defies estimate, and gives assurance to our people in the future of unbounded wealth.

Peace and quiet has been restored to Utah, and some additional legislation will be required to place its inhabitants on an equality with those of other territories. In that territory there are already more than two million acres returned as surveyed and ready for market. Occupants are upon these lands and want to obtain titles to their homes. He therefore submits whether it would not be an act of justice to the people of Utah to establish in that territory a land office, and, at the same time, in express terms, extend the pre-emption laws, so as to embrace all the inhabitants residing within its limits.

The graduation law will continue to prove a fruitful source of fraud and annoyance unless some change is made in its terms. Congress should require proof of settlement and cultivation prior to the admission and entry, or should release the purchaser from the condition now imposed.

The Secretary recommends a portion of our *past* policy with regard to the Indians, and says the removal of the tribes should be avoided. Separate lands should be assigned to individuals, without the power to alienate or encumber them, and money annuities should be expended for the common good, instead of being divided *per capita*.

The whole number of army pensioners under the various acts of Congress is 10,732, requiring for their payment the annual sum of \$902,700. The whole number of navy pensioners is 892, and the aggregate amount of their payments is \$136,501. It appears that the total disbursements for pensions up to this date is about \$90,000,000. If to this sum be added the bounties in lands, (62,739,632 acres) estimated at \$1 25 per acre, the total amount granted for pensions and bounties will be \$168,424,202.

On the subject of the next census the Secretary recommends an adherence to the law of the 22d May, 1850, in the belief that

a census taken in accordance with its provisions will afford the greatest amount of accurate information and prove most satisfactory to the country.

The income of the Patent Office for the three quarters ending September 30, 1858, was \$150,984. Its expenditures during the same period amounted to \$144,433, showing a surplus of revenue of \$6,550 against an excess of expenditure over the receipts of \$2,536 for the corresponding quarters of 1857. From the 1st of January to the 30th September, 1858, 4,091 applications for patents were received, and 696 caveats filed, against 4,095 applications and 820 caveats for the corresponding quarter of last year. During the same period 2,816 patents were issued, 15 extensions granted, and 1,256 applications rejected. The Secretary recommends the establishment of a Board of Appeal in addition to the present force of the Office.

COVINGTON AND LEXINGTON RAILROAD.

The Annual Meeting of the Stockholders of the Covington and Lexington Railroad, took place on the 15th inst., at their office in Covington. Some eighty or ninety Stockholders were present, representing about three-fourths of the entire capital stock. The Company met at half past ten, and organized by calling Wm. Lyle, Esq., to the Chair, and appointing G. M. Clark, Secretary. The President, on taking his seat, explained the principal object for which the Stockholders had been called together, and announced that the annual report of the President and Secretary were ready. Mr. G. M. Clark, then proceeded to read the President's report as follows:

REPORT OF PRESIDENT OF COVINGTON AND LEXINGTON RAILROAD COMPANY.

OFFICE COV. & LEXINGTON R. R., }
COVINGTON, NOV. 1, 1858. }

To the Stockholders of the First Division of the Kentucky Central Railroad:

In conformity with the charter of your company, it becomes my duty to lay before you a history of the action of your Directors and an exhibit of the condition and operations of the road for the fiscal year just closed. As reported to you by supplement statement at your last annual meeting, some radical change of policy was found to be imperative, and for the causes then given your managers, stopped payment of interest on certain claims from and after November 12th, 1857, paying on said claims only the interest due prior to that date, so as to make no distinction between parties holding the same class of obligations.

There has been no interest on coupons paid on any of the claims so suspended, which became due after the date of the order above mentioned, and no definite plan has been adopted for adjusting said indebtedness, from the fact that it was deemed advisable to first make some amicable arrangement with the holders of the mortgage bonds, negotiations for which purpose have been pending for some time, but so far without success.

To enable your Directors to secure the property of the road, and put it in a condition that it can be profitably and safely worked, it was absolutely necessary and deemed advisable to at once expend a considerable portion of the earnings in building cars, extending

side tracks, ballasting and removing defective cross ties and rails from the main track, thereby making it more permanent and preventing rapid decay.

The depot at Paris was built to keep from transacting the heavy business of that station out of doors. The amount due officers and laborers, which had been held back to enable the company to pay the coupons that were paid, was to be provided for, and has been partially paid.

And there were other claims against the prosperity of the company which, if not paid, would have subjected the company to serious loss and inconvenience, which claims have been partially paid and arranged.

In making these expenditures, and others of a similar nature, in addition to the regular operating expenses, your Directors were left without the means to pay the interest on the Third Mortgage Bonds, falling due the first of June last, and that on the Second Mortgage, due the first of September last, also Coupons due at the same time on the Bonds of the Company, guaranteed to the City of Covington. They, therefore, stopped payment of all coupons on said bonds, except those due previous to the above dates, hoping to arrange with the holders for a further expenditure in building depots, permanent bridges, etc., improvements absolutely essential, and which would add greatly to the value of all the securities of the Company, as well as increase the net earnings of the road.

Your managers deplore the necessity of asking creditors for assistance, but they feel conscious of the rectitude of their policy, and that they ask nothing which will not be beneficial to all the interests involved.

The business over your road for the past twelve months has been more equally distributed through the entire year, having had no excessively large receipts or very small ones in any one month, enabling the traffic to be conducted with more safety and satisfaction, with the inadequate accommodations possessed.

The earnings have been somewhat less than anticipated, owing to the falling off in passenger travel, which no doubt may be attributed in part to the financial panic last Fall, from which the public have not yet entirely recovered. Nearly all of the roads of this country and especially those in the West, show conclusively, by their receipts in this department, that there has been some general cause to keep the people from traveling.

Notwithstanding the decrease in this particular, the gross earnings exhibit a gradual increase, although the work has been done with a short supply of rolling stock and without comparatively any depot accommodations, proving satisfactorily the growing importance of your work to the country through which it passes, and that the local business being steadily built up, will, in a few years be sufficient to sustain your company, if it can be relieved of its present embarrassments, which have from its commencement hung over its management like an incubus. It requires no elaborate theorizing to demonstrate the first and continued cause of all the financial difficulties of this Company, as it is well known that the road was commenced and prosecuted to its present condition during a period of time when there was one of the greatest financial panics with which this country was ever visited. It was want of capital at the beginning of the enterprise, and this has continued to the present time.

To relieve your road of its present difficulties is no small undertaking, but your Directors used and will continue to use their most urgent and honest efforts to obtain that aid, hoping, if met with a spirit of liberality by all parties concerned, to eventually succeed.

Your track (excepting bridges) is now in a better condition than it ever has been, and with the addition of sufficient rolling stock, good depot accommodations, water stations, and permanent bridges, would be a first class road, as from its central location and importance it should be.

For a detailed statement of the operations of the road, I refer you to the Superintendent's report, and for the financial condition thereof to the tabular exhibit accompanying the Secretary's communication, all of which I herewith respectfully submit for your consideration. JOHN T. LEWIS.

After reading the President's, the Secretary presented his yearly statement; an abstract, but containing the substance, is annexed. The report of the Superintendent was also read.

Judge Kincaid followed the reading of the reports in a lengthy speech, advocating that the election of Board of Directors be postponed until conferences could be had with bondholders, in order to arrange peacefully the troubles of the road, and discharge from Courts the suits that are now hanging so threateningly over the Company.

R. B. Bowler introduced a resolution that two dollars upon each share of the stock of this Company, payable by the first day of January next, be assessed, for the purpose of paying the interest of the Second Mortgage Bonds. That the Secretary notify the shareholders in writing, and publish the same in the papers of Cincinnati, Paris, and Lexington.

Pending the discussion of the resolutions, the meeting adjourned until 2 P. M., at that time to convene in the Court House.

AFTERNOON SESSION.

Pursuant to the hour of adjournment, the Stockholders convened at the Court House. Col. Benton arose upon its opening and invited an expression of opinion of all interested. From the statement of the Directors laid before the meeting, he thought they were fully justified in the course they had taken in not paying the interest on the company's bonds.

In order to have put the road in its present condition, the majority of the Directors have pledged their individual name and done every thing that men could do. He was for assisting the company through its present difficulties. Men residing in the interior had ample funds for the present, and in fact do not know what to do with their money. He knew of nothing better than for these parties to invest their means in this road.

A Stockholder.—Yes, and never hear of it again.

Col. Benton.—Well, as my friend observes,

that might be the case, but still it would open up resources of the country, which is as much as any stockholder could wish for. The Col. dwelt at length on the benefits to be derived from an extension of the road into Tennessee, and suggested a postponement of the election until the 1st day of January, 1859. During his remarks he was particularly severe on Cincinnati for not having been more liberal in the support of the road.

Mr. Henry Vallette—a large bondholder—made some observation which elicited in reply from Col. B. the remark that fortunately all the creditors did not reside in Cincinnati.

Judge Carr was afraid that a lack of courtesy had existed between the Committee of the Second Mortgage Bondholders and the Directors. He was in favor of Col. Benton's proposition for postponement. He also was in favor of making a proposition to the Bondholders, and getting their opinions as to the policy of a change in the Directory. The parties who were now pressing for a sale of the road might find, in case of being successful, that they had the worst of the bargain.

R. B. Bowler said that he had spoken to the secretary of the Bondholders Committee this morning, and was informed that the whole matter was in the hands of the Trustees; how then were they (the Directors) to approach the Bondholders?

Henry Vallette, as a bondholder, could only say that they (the bondholders) did not want the road. Mr. Vallette was here interrupted by Mr. Bowler, and a bitter personal conversation occurred between the two. Mr. Vallette looked menacingly at Mr. B., and stating, with great vehemence, that he was personally responsible for all that he uttered here or elsewhere, and would not be addressed in that manner again.

Mr. Bowler.—Will the gentleman sit down; he interrupted me whilst speaking, and he (Mr. B.) claimed the right to the floor. Mr. B. continued and said he considered the gentleman who had just spoken as insane—crazy. He, that gentlemen, pointing to Mr. V., as a second mortgage bondholder, has no business here.

Mr. Vallette to Mr. Bowler.—That gentleman will not permit you to indulge in personalities.

Here followed a scene of confusion, and cries of "Order, order, order," "Go in," "Sit down, Vallette," "Claim your privilege, Bowler," etc., etc. The Chair the while pounding on the desk with a heavy cane, calling on the members to preserve their dignity. Peace was finally restored and the Chair stated, that as the chief officer of the meeting, he would not permit stockholders to indulge in criminations and recriminations.

Mr. Vallette regretted the occurrence, and asked the indulgence of the Chair, that he might make a few remarks. He was in New York, and present at the meeting of bondholders, among whom considerable feeling was exhibited. He did not consider it necessary to sell the road, but was strongly of the opinion that it was not in a condition to pay its debts at the present time. He had naught to say against its management, but thought that it was as well managed as any of the roads in Ohio, and would be willing to say in any of the Northern States. When he invested his money in the road, he was of the opinion that it was one of the very best in the country. The interest that has already accrued on the Bonds was more than any

future revenue could realize, the only hope for it was its Southern extension. The first object of those interested, was to endeavor to adjust the road fairly between the Bondholders and Stockholders, all having in view the future development of the country, and the interchange of manufactures for the produce of the South, we return the products of the North, if the interest due on the Bonds, a suit for which is now pending in the Fayette county Court, were paid before the day of trial, he pledged his word that the case would be withdrawn.

Col. Benton here offered the following resolutions:

That a committee of five be appointed by this meeting who are instructed to inquire into and report,—after a conference with its creditors—as to the best course in their opinion for this company to pursue in reference to its affairs, and that for the purpose of giving the committee time for enquiry and consideration, that when this meeting adjourn they do so to meet on the 25th of January next, at this place (City Hall of Covington.)

That the Directory be requested to appoint that day as the day of the annual election.

That the holders of the several mortgages guaranteed and Income Bonds, be requested to appoint a committee to confer with any committee appointed by this meeting.

Gen. Leslie Coombs thought that all this matter could be satisfactorily settled, if the rough points were only smoothed off. He advocated the *pro rata* system, according to the value of stock. He referred, in the course of his remarks, to the New York Central and Toledo and Wabash Roads, citing them as cases, in sustaining his *pro rata* view. The Covington and Lexington Road, continued Mr. Coombs, is sick with debts outside and inside; it has all kinds of diseases—small pox, cholera, neuralgia—which are running it as fast as possible to the devil. He was satisfied that the road could be saved. Get men of business to attend to its necessities. Every one may not get full shares, but make it large and small, let the division be equal on all. He would be satisfied with any *pro rata* arrangement, so that the road could be put in a solvent condition, and then be made from that time forward to pay.

B. W. Foley said that fine speeches were all well enough, but all the overtures proposed by the preceding speaker had been made to bondholders, and urging it again only tended to the disparagement of the road.

Gen. Coombs disclaimed any intention of wishing to speak against the interest of the road.

Mr. Foley wanted the bondholders to retire a quantity; let each reduce his interest to his *pro rata* value. He also spoke against electing more than one or two bondholders to the Board of Directors. It would not do to let them attain a majority, and all will be lost, and stockholders turned afloat to take care of themselves. The interests of the bondholders are directly antagonistic and in contravention to those of the shareholders. The subject was discussed at great length, and by the greater majority of the Board.

Upon call of question for the resolution of Col. Benton, Mr. Foley desired that they be separated and voted upon singly, as they embraced two separate and distinct propositions.

The first was here submitted, and carried.

Mr. Foley here claimed that so much of the resolutions as referred to the suspension of

the election should be voted for by shares, and not by acclamation. A wordy warfare ensued, which was finally closed by the Chair deciding in accordance with the position assumed by Mr. Foley.

The Clerk made preparations, and at six o'clock announced the vote to be cast, standing 2,439 for suspending the election, and 3,269 against it; it was, consequently, lost.

At this announcement Mr. Moore arose and moved that the vote of the City of Covington be stricken out, as those who cast it had not been delegated with proper authority.

By a gentlemen.—Is Mr. Moore a stockholder in this road?

Mr. Moore replied that he was not a stockholder, but a member of the Covington Council, and as such he had a right to a seat in the Convention. The Chair decided that the gentleman had a full right to occupy a seat in the meeting, as his position made him equal to a Stockholder. The motion was called for and lost.

Motion, that all votes by proxy be excluded; lost.

R. B. Bowler's resolution, offered at the morning session, was brought up, and by request withdrawn.

The Convention then adjourned until 7 P. m., for the election of Directors.

ABSTRACT OF SECRETARY'S REPORT.

ASSETS.		
Construction as represented		
last year.....	\$3,719,563 80	
Added this year.....	11,434 66	
		\$3,730,997 80
Locomotives same as last year.....	\$123,34 00	
Passenger cars last year.....	17,900 00	
Added this year.....	1,812 19	142,946 19
Freight cars last year.....	\$114,440 00	
Added this year.....	13,469 63	127,929 63
Mail and baggage cars last year.....	6,750 00	
Construction cars last year.....	6,230 00	
Hand and dump cars.....	3,030 00	
Added this year.....	6,547 00	22,557 00
Depot grounds and buildings.....	76,115 77	
Added this year.....	12,995 64	89,111 41
Machine shops and materials.....	2,740 40	
Added this year.....	4,570 74	28,911 14
Lex. & Danville R. R. stock.....	62,000 00	
K. y. Trust Co. Bank stock ..	10,000 00	72,000 00
Income Bonds, bearing 10 per cent. interest, in hands of S. J. Walker.....	20,500 00	
Income Bonds, bearing 6 per cent. interest, in hands of S. J. Walker.....	63,500 00	84,000 00
Income Bonds, bearing 10 per cent. interest, on hand.....		5,500 00
Unadjusted balance of S. J. Walker, late Treasurer, which is now being diligently adjusted, and will soon be finally settled.....		78,889 89
Due on stock subscriptions.....		53,113 77
Bills receivable.....		16,378 10
J. F. Winslow owes for one bond.....		1,000 00
Unadjusted balance due the Co.....		29,467 64
Amount sent to N. Y. to pay Coupons.....		14,39 00
Due from U. S. for Mail services.....		3,655 51
Due from Agents.....		5,450 61
Cash on hand Nov. 1, 1854.....		6,176 88
Total.....		\$4,545,043 10

The rails are laid on the New London and Stonington Railroad, and this new land route between New York and Boston will soon be in operation. A large steam ferry-boat is being built for the transit between New London and Groton, on board which passengers will be enabled to obtain dinner.

THE PACIFIC RAILROAD IN CONGRESS.

SENATE, Dec. 17.—The *National Intelligencer* contains the following account of the speech of Senator Bell yesterday, on the Pacific Railroad bill:

Mr. Bell briefly stated his views as to the importance and necessity of the construction of the road mainly for war purposes, and incidentally as beneficial in a commercial point of view—the opinion he had expressed years ago, and he had no reason to change it. This was an undertaking of too much magnitude to be left to private enterprise, and the main objection he had to the amendment of the Senator from Mississippi (Mr. Davis) was, that it did not propose to advance money enough to secure the construction of the road. He thought that as a matter of economy it would be better to give one hundred and fifty millions of dollars if necessary, than not to have the road built. He believed that unless the Government gave aid to the road, it never would be a success, nor could we hold our Pacific Territory.

He held it to be a matter of necessity that we should have a route across the country in the event of a war with any foreign power. When he concluded the bill was informally laid aside.

SENATE, Dec. 20.—The Pacific Railroad bill coming up as the order of the day, Mr. Wilson, of Massachusetts, offered a new bill as a substitute, providing for the location of the route from the Missouri river to San Francisco, through the region between the 30th and 43d parallels, the location to be determined upon by civil engineers.

Mr. Polk's amendment, to strike out in the original bill the words, "from the Missouri River between the mouths of the Big Sioux and Kansas rivers," and insert instead, between the forty-ninth parallel, on the boundary of Minnesota and the Southern boundary of the United States, was lost—yeas 17; nays 29.

Mr. Foster, of Connecticut, discussed the merits of the road, chiefly in regard to the question of tariffs on the materials to be used, and moved an amendment, requiring that the road be built exclusively of American iron. This motion excited considerable discussion.

Mr. Gwin, of California, considered that the bill, as it is at present, provides for all legitimate protection to American iron interests.

Mr. Simmons, of Rhode Island, was strongly in favor of the use of the best material, even if it should cost double; but there was no doubt that the requirement of those hundred thousand tons to be offered by contract would bring out offers at the lowest price it would be profitable to manufacture at, and he did not want it at less.

Mr. Clingman asked Mr. Seward whether there had not been a breakage of American iron on the New York and Erie Railroad.

Mr. Seward replied that he had not so heard, and he thought not.

Mr. Clingman went on to discuss the relative cost of the production of iron in England and America, proving that from the low rate of wages paid, England can produce cheaper, inasmuch as nine-tenths of the manufacture of iron consists in labor. He also ridiculed the idea that English manufactures had lowered their prices ten dollars per ton for the purpose of breaking up American manufacturers. The English manufacture four millions of tons of iron annually; and ten dol-

lars per ton would represent forty millions of dollars, which is rather expensive rivalry.

We might as well say that the American cotton planters have lowered their prices in order to break down the competition of America. Further, it was difficult to say what was the raw material. Iron ore is raw material to pig iron, pig iron to bar iron, and bar iron is a raw material to the blacksmith. He would regard the iron as material for the railroad, and admit it duty free.

The provisions of Mr. Wilson's bill are substantially as follows: The President and Senate shall appoint five Civil Engineers, practically experienced in the laying out and construction of railroads, who, within two years, shall locate the route of a railroad from the Missouri river to San Francisco, through the region between the thirty-fourth and forty-third parallels. If the President approves that the railroad, as located by them, shall be built by the Government, under the directions of a Board, to consist of the Secretaries of War and Interior, the Postmaster General and Attorney General, who shall contract with the lowest bidders for its construction, in sections of not more than twenty-five miles in length, money to build the road shall be raised by loan, as needed, in sums of not more than ten millions of dollars annually, from the passage of the act till the location of the road. All the public lands between the aforesaid parallels shall be withheld from sale, but shall be open to pre-emption by actual settlers after the road is located. The proceeds of the sale of lands for one hundred and fifty miles on each side shall constitute a fund for the construction of the road and the payment of the debt incurred by it.

Mr. Seward expressed himself generally in support of Mr. Foster's amendment. He said that the railroad would be mainly within the Territories and not the States. The supply of iron will likely, therefore, be drawn from the Western States, perhaps Missouri or Texas, or from the Territories themselves. He would consider it a reproach that an American road should be made with foreign iron to pass over American coal and iron beds.

Mr. Bigler, of Pennsylvania, was also in favor of building the road with American iron, and instanced the case of the Pennsylvania Railroad and the Baltimore and Ohio Road, the one built of American and the other of English iron.

Mr. Iverson, of Ga., opposed the amendment as likely to produce a combination of American iron-mongers to raise the price. He agreed with Mr. Clingman in regard to the policy of admitting the iron duty free.

Mr. Foster's amendment, that the road be built exclusively of American iron, was then adopted—yeas 25; nays 23.

Mr. Rice, of Minnesota, spoke at length on the Pacific Railroad bill, which he introduced on Thursday last. The following is the substance of his bill, which has been read twice and ordered to the Committee on Public Lands; it is entitled, "A Bill to aid in the construction of certain railroads to the Pacific, to encourage settlements on their lines, and for other purposes." Section one authorizes the President to cause the public lands, to the extent of forty miles on each side of the routes after mentioned, to be surveyed and the Indian title extinguished, and that on the payment of ten cents per acre by the present settlers, the pre-emption be extended thereto.

Section two proposes that every alternate

section for ten sections in width, on each side of said roads and branches, be granted to the States and Territories upon the lines of the proposed roads, namely: from Lake Superior to Puget's Sound, with a branch to the navigable waters of the Columbia, from the western border of the State of Missouri to San Francisco; also, from the western border of the State of Texas to San Pedro, or San Diego to the Bay of San Francisco.

Section third: The said lands so granted to the States and Territories shall be subject to the future disposal of the Legislature thereof for the purposes above expressed, and for no other.

Section four defines the conditions of sale of the said lands, that two hundred sections may be sold every twenty continuous miles of the road as completed: but if such roads or branches be not completed within twenty years, all unsold lands shall revert to the United States.

Section five requires that the United States mails shall be transported over the said roads at prices to be fixed by Congress, the President being authorized to name the price temporarily, till fixed by law.

Section six: The Government shall have the priority of right for all purpose of transportation.

Section seven sets aside the sixteenth and thirty-sixth sections for school purposes.

Section eight: The President shall determine the terms, with the consent of the States and Territories in which they are placed.

Without concluding the subject, the Senate, on motion of Mr. Seward, adjourned.

The Pacific Railroad Bill was taken up.

Mr. Seward said that the descendants of the Dutch Colonists of New York keep forever bright the memories of their Fatherland. When, however, he traveled in Holland, he could hardly find there one lingering tradition of the settlement of the New Netherlands. It is always so. The affection of emigrants for the native country is even stronger than the sympathies of that country for its exiles. The Senators from California, as yet only representatives here of society on the Pacific coast, are committed to this great measure and earnest in its support. So he hoped that if his arguments in response to them seem addressed to the Senators from the Atlantic States, they will do him the justice to reflect that it is only on this side of the Rocky Mountains that snow and ice of indifference and prejudice resist the conviction.

He said he would not say much concerning the details of the bill. If he were allowed to prescribe a route, and the policy of constructing a Pacific Railroad now, he would choose a path which would be a continuation of the road that our great north-western emigration has hitherto followed. He would discard all employment of companies and all grants of public lands, and would build the road as a military, postal, or national highway, with the money and credit of the Federal Government, and surrender the land along its route to actual settlers free of charge. He would increase the revenue by an increase of imports and create a sinking fund to absorb gradually the public debt: but he had concurred in presenting this bill because the only alternative. He admitted there were many objections to the bill which were obnoxious, but the time for deliberation is to end and action to begin. He brings earnest in his desire for a Pacific Railroad, he would accept this bill.

He then answered successfully the general

objections against constructing the road. Commerce is only an incidental interest in connection with the road. It is wanted first and chiefly for postal and military purposes. It is a great error to rely on commerce for such a highway in a territory, and where society has to be called into existence, or that it can be depended upon till society is created. The treaty of Guadalupe Hidalgo extended the national jurisdiction across the Rocky Mountains to the Pacific, and from that moment the necessity of postal and military highways across the country was disclaimed. Our contentions in Utah, Central America, Mexico, and with France and England, are the legitimate consequences of a reliance on routes through foreign countries instead of our own. He did not pretend to know how long we intend to flounder on in this erroneous policy, but was sure that the interior region will not be settled until this railroad is built, and probably the Pacific States will now or never remain united to the Atlantic if so united. The fates are always busy in weaving a fatal cord for indolent and improvident nations, and it depends on the action of Congress now whether the city of Washington shall remain the capital of the whole United States, or only of the United States of the Atlantic, while the City of Mexico may become the capital of the United States of the Pacific. He would not debate the constitutional power of Congress to authorize the construction of the road, for even the strictest constructionist of the Constitution admits the power of Congress, in cases of real necessity, to construct post roads within the organized Territories of the United States, and, in case of possible danger, to construct military roads.

Let us be deeply impressed with the fact that the American people, now numbering thirty millions, and increasing at the rate of one million annually, of free, ambitious men, such a people can not remain stationary. Activity is a law written in the social constitution of all States. Under its influence France has disturbed the two hemispheres for two hundred years. Great Britain has extended her domain around the earth. Spain has discovered and colonized half the globe. Portugal has reclaimed a portion of it which before had been lost. The abolition of federalism and slavery in modern Europe, and the conversion of the Western nations to Christianity, are the results of the same national activity.

In obedience to the same law, we have rescued the country we inhabit from Spain, France, and Great Britain, and all of our renewed diplomatic conflicts are so many manifestations of the energy and ambition of the Americans proper. It is obvious that this activity must take either a martial or civic direction, and that if it do not receive the latter from the hands of the Government, it will force the Government to guide it into the former. How otherwise can we explain the constant agitation of the filibuster movements; the Ostend Manifesto and the Monroe doctrine? War is hazardous, desolating its greatest benefits obtained at a dreadful cost.

History teaches us that the constant practice of war is incompatible with the permanency of a system of self-government. If he were asked why the British race on this continent is republican, he would say it is because the national activity assumes a peaceful character as monarchical countries assumed a military one. If the national activity is to

have a peaceful direction, it must be confined in its energies, chiefly within our own territory. Our domain is already broad enough, and the opportunity for our activity must be commensurate with it. The necessities of order, safety, and of the Union require us to consolidate our energies within it. The Pacific Railroad, with its connections and lines of telegraph, are the engines by which this consolidation must be affected. He did not shrink from the enterprise because of its magnitude. Were less formidable, it would be less adapted to the spirit and genius of the American people.

The enterprise is not really formidable when considered in relation to the benefits of peace, wealth and strength to be derived from the agricultural, mineral, manufacturing and commercial resources of the region. In conclusion he would say that if the National activity is to take a peaceful and beneficial direction, the responsibility of directing it belongs to Congress. It can not be left to the States. The revenues belong to the Federal Government, and it alone has the power to within the territories. He called on every Senator to win for himself the gratitude of posterity by connecting his name with this great work. It seemed to him that there was no easier way to win the character given by the Roman historian to the honored statesmen: "He labored for himself with moderation—for his commonwealth with earnestness."

Mr. Ward, of Texas, then addressed the Senate in favor of the Texas route, but his remarks were indistinctly heard.

Mr. Wilson, of Massachusetts, moved an amendment that the road be located between the parallels of 34 and 43.

The debate was then postponed until to-morrow.

RAILWAY PROPERTY IN GREAT BRITAIN.

The following resolutions which were adopted by the Railway Shareholders' Association in Great Britain on the 31st August, 1858, are suggestive at this time to similar interests in the United States:

First. That in the present depreciated condition of railway property, it is desirable that the directors and shareholders should co-operate with each other for the following purposes:

1st. To lay down some general principles and rules applicable to the management of their undertakings, so that ruinous competition may in future be avoided, and railway property rendered a more sound and profitable investment.

2d. To settle and fix an equal scale of rates and fares for all companies having common termini, so that the greatest amount of net profit may be secured to each of them. To limit speed at which the trains shall be run by companies, which traverse the same districts, and to prevent the funds of existing companies being applied towards the promotion of new lines.

3d. To agree by mutual consent on one uniform system of railway accounts, and on the policy of placing capital and revenue under separate guardianship and control.

4th. To call the attention of Her Majesty's Government and the Legislature to the injustice inflicted on railway shareholders, without any apparent advantage to the country, by the formation of competing lines, whilst the existing companies are bound down by maximum rates and fares for the public

protection; and to agitate for the appointment of a permanent, impartial and respectable tribunal, to investigate and report on the merits of private bills in the place of Parliamentary committees.

5th. To obtain the promised alteration in the law applicable to the rating of railway companies for parochial and local purposes—a modification of the passenger tax—an amendment of Lord Campbell's act—and a more equitable arrangement with the Post-office authorities in reference to transmitting merchandise through the mail bags.

Second. That copies of the above resolution be forwarded to the secretary of each railway company, and that the shareholders be earnestly requested to join this committee, and to contribute toward the expenses which must necessarily be incurred in accomplishing the objects we have in view for the protection and restoration of railway property.

PACIFIC RAILROAD.

Most questions find their solutions in a manner far different from the one usually anticipated or predicted. That of the Pacific Railroad is likely not to prove an exception to the general rule. The discoveries of gold, both on the Pacific, in the British possessions and on the eastern slope of the Rocky Mountains in our own, will lead to a most thorough examination of the whole belt of country through which any route is proposed. Such an examination could hardly have been made except from the stimulus imparted by these discoveries. They will lead to careful explorations of every portion of the interior of this continent, the topography of which will soon be as well known to us as that of the Eastern States.

Another more decided gain will be the occupation of the interior wherever gold is found, affording thereby means for the construction of a railroad, and business for its support. Should the present reports of discoveries at the head of the Platte be fully verified, we should not be surprised to see these *placers* occupied in a few years by 100,000 people. Such a population, exclusively mining in its character, would give as much business to a railroad as five times the number in the old States. Should a new California spring up at the eastern base of the Rocky Mountains, it would not be long before it would be reached by the railroads which already extend to the western boundary of the State of Missouri.

It is almost impossible to construct railroads in any part of the country, in advance of settlements. It is well known that there is a wide belt of sterile plains following the eastern slope of the Rocky Mountains, which can never serve any other agricultural purpose than grazing. In the mountains there is probably sufficient rain fall for most kinds of crops. If not, the numerous streams will give abundant means of irrigating a sufficient area for the support of a large population. The Mormons do not attempt to raise anything except by irrigation. The great drawback to a people so situated is the want of markets. Could these be created by the discovery of gold mines, there is nothing to prevent the existence of populous and wealthy communities in the very heart of the continent, which has hitherto been regarded as inaccessible and worthless, and as an inconvenient and wide spread waste, separating us from our Pacific possessions. It now seems probable that every portion of the continent

has its comparative advantages, and that the interior, which is so far removed from the seacoast as to destroy all value for the products of agriculture for exportation, may be filled with the precious metals, the production of which will create domestic markets, and give employment to every variety of industry, the commercial value of which is represented by metals that will wear at a very slight relative expense. We appear to be approaching another era in the history of the country, similar to that which marked the discovery of gold in California. The new discoveries bid fair to make us acquainted with, and to fill up every unoccupied portion of our wide domain.—*Am. R. R. Journal*.

THE PACIFIC RAILROAD.

SOME ADVANTAGES OF THE CANADIAN ROUTE.

Whichever territory, and whichever route the Americans decide upon for their Pacific Railroad, they will have one great difficulty to contend with which does not exist on our side of the border, viz: the aridity of the climate. On their extreme northern route, passing near the head waters of the Missouri, there falls not rain enough to render agriculture possible, or even to enable trees to grow. On their extreme Southern route such is the dryness of the air and soil, that camels from Arabia have been imported to traverse it, while stunted bushes, clinging in the crevices of the volcanic rock, are all the vegetation perceptible for many hundred miles. Much of the country between these two lines is known even to the school-boy as "the great American Desert," so large in extent that Professor Bache, the Superintendent of the United States coast survey, has recently declared that the American farmer must soon begin to renovate the old farms of the old settled republics, since there is very little more available land "out West." But on the Canadian route, this is far from being the case. The climate, according to all authorities, is not dissimilar from our own; the experiments at the Hudson's Bay Company's posts having conclusively established that cereals and other vegetables can be successfully grown at every desirable point between the Pacific and the Lakes, north of the American frontier. This is, of course, in the summer; in winter the condition of things is curiously reversed, yet still is much to our advantage. We have all heard of the quantity of snow the American forces found on the prairie during the Mormon war, and that on the route from Utah to New Mexico their expedition—sent in search of horses—had to wade through five or six feet of it, the men having to clear the way for the mules. But on the British side, for some unexplained reason, very little snow falls, and Lieut. Saxton informs us that "cattle keep fat in winter as well as in the summer on the nutritious grasses."

Hence accrues another advantage, also of very great importance. It is this, that whereas our neighbors would have to build a continuous line of railroad throughout, before they could in any way accommodate commerce, we need only build a line from the Pacific to the head waters of the Saskatchewan, and connect Red River with the Atlantic, to have already the shortest route from Western Europe to Eastern Asia. For the Saskatchewan rivals the Mississippi in the extent of its navigation; and there is but one rapid between its mouth on Lake Winnipeg, and the base of the Rocky mountains. A steamer could thus make the connection between the Eastern

and Western ends of our railroad; lessening the expense of forming the communication between Halifax and Vancouver by several million pounds, and rendering the future construction of a continuous railroad line very much easier.

But a consideration of paramount importance, which can not be too prominently brought forward, is the supply of fuel, and here again our route has a manifest advantage. The great Ocean Steamship Companies establish, at various points in the track of their vessels, coaling depots for their fleets, to supply them with that indispensable article at different periods in their trips, and thus save inconvenience and expense. It does really seem—so plentifully is coal distributed over the line of which we boast—as if it had been placed there specially for the accommodation of its future traffic. The Nova Scotian coal, at one end, will supply the Atlantic steamers; the Vancouver's Island coal, at the other, can be put on board the Pacific steamers from the veins which run down to the very water's edge. On the Saskatchewan and the Assiniboine, there is coal in plenty for river steamers or locomotives.

It will be observed that we speak, now, of facilities alone; we leave to others, for the present, the task of describing or exaggerating the difficulties to be encountered in the construction of a railroad across the continent. Such a road has become a necessity to the world, and will, we think, be built, in spite of obstacles, either by Americans or by British subjects. Progress and national prosperity, as now understood, are relative or comparative terms; the nation which would be greatest cannot allow itself to be outstripped in the race for supremacy, either in trade or political influence. Hence we conceive, both British and Canadians should work together, heartily and hopefully, to be the first to link together the Northern Atlantic and Pacific Oceans, and not allow a foreign rival to reap the benefit of the impetus which the first establishment of such a route would undoubtedly give the nation which built it.—*Hamilton (Canada) Spectator*.

RAILWAY MANAGEMENT.

A plan put forward by Mr. Thomas Wrigley, of Bury, Lancashire, for the government and working of railways, so as to render it impossible for the capital account to be tampered with, has deservedly attracted favorable notice. He would have in each case two sets of officers, one of whom should hold the property of the line as trustees, while the other should work it as tenants. It would be vain, however, to hope for any recognition of the advantages of the scheme from boards of directors, although they might easily carry it out by a simple division of their functions. Shareholders must act if they wish any thing done, and there is little encouragement to believe that any thing will overcome their apathy. The prospect, nevertheless, is that a general adoption of the proposal would at once lead to an improvement in the market value of every description of railway security.—*Merchants' Magazine*.

The damage to the C, W. & Z. Railroad by the recent rains is but trivial, being confined to the loss of "false work" for reconstruction of Bridge No. 3, and a portion of the new structure. Trains run as usual, passengers and freight being transferred at that point.

FRENCH RAILROADS.—The various French railroad companies intend to introduce into their service several important ameliorations, which will tend to give to families much additional comfort in first-class carriages. Special carriages are to be constructed, composed of saloon, bedroom, and ante-room, which may be engaged at a special tariff. A family, composed of five or six persons, may thus undertake the longest journey with but little fatigue, and, if necessary, take their servants to wait on them.

COTTON STATISTICS—CROP OF 1853.

During the past autumn your extensively circulated paper, both at home and abroad, appropriately presented a view of the prospect, at that time, of this year's cotton crop. Owing to an unusually long continuance of very favorable and sunny weather during September and October, and until late in the autumn, there having been no frost in "the cotton region" worthy of notice before the 10th of November, and none "to kill" generally until about the 20th of that month, when the rains set in, the prospect of the cotton crop in September has been more than realized. Instead of the crop being about the same quantity as last year, not quite 3,114,000 bales, it seems to be ascertained that the present crop will range between 3,300,000 and 3,500,000 bales—good crops having been made in the States east of Mississippi, but in that State, by the accounts of intelligent persons who have lately been there, as also in Louisiana and Texas, and some other of the South-western States, or parts of them, it is believed; as a general result, not more than half crops have been made, as is certain in many localities. The inundations along the Mississippi river and some of its tributaries destroyed whole crops the last spring. The extent of the damage is not yet known, and is variously estimated, as is also the general crop.

The uncommon extent of the receipts and sales at the Cotton marts so early in the season, owing to the circumstances of its unusual maturity, the bulk of cotton having gone forward two months in advance of ordinary seasons, has perhaps led to the erroneous opinion, especially in Europe, that the cotton crop of the present year is much larger than it actually is. Should it even exceed, which does not now appear probable, 3,500,000, that quantity will be inadequate to the demand. This scarce needs demonstration. For several successive years the crops in this country have been short, and the agitated state of India must have caused a failure of the crops there. It will be observed that the crop in this country of 1855 was 3,527,845 bales; and since then, up to the present year, has never been exceeded. Last year's crop was 3,113,962 bales.

The total consumption in the United States last year was less than 595,000 bales, while the export to foreign ports exceeded 2,500,000 bales. Only about 100,000 bales, supposed to be mostly inferior and unsaleable cotton, was left on hand, in this country, the first of September, 1858. These statistics show what will be the probable demand for the present crop of cotton, independent of the improved trade, and the opening of China and India to the fabrics of the United States and England. Prices in this country for the present crop, as paid, have ranged from about eleven to thirteen cents per pound, fluctuating in a measure according to the prices at Liverpool and Manchester.

Alabama, it is supposed, will be again the cotton "banner State" this year. Her bales, it will be observed, average five hundred and fifty pounds; in Georgia, four hundred. In that State a full crop of cotton, it is said, has been made this year that "will bring \$21,000,000, at present prices."

According to the census of 1850, the cotton-growing region produced "ginned cotton bales, of four hundred pounds each," as follows: In Alabama, 564,429; Georgia, 499,091; Mississippi, 484,292; South Caro-

lina, 300,901; Tennessee, 194,532; Louisiana, 178,387; North Carolina, 73,845; Arkansas, 65,344; Texas, 58,072; Florida, 45,131; Virginia, 3,497; Kentucky, 758; making a total of 2,569,079; and showing an increase in the product of the cotton in this country in eight years of about one million of bales, now worth over \$50,000,000.—*Cor. National Intelligencer.*

SOUTHERN PACIFIC R. R. CONVENTION.

NEW ORLEANS, Dec. 20.—The Southern Pacific Railroad Convention met at noon, and organized by appointing Col. Gorin, Chairman, and Col. Durrett, of Louisville, and Delafield, of St. Louis, Secretaries.

President Fowlkes reported that \$230,000 for the relief of the Company's debt has been already provided. He says that not one half of the Stockholders had been heard from, and that the required amount would undoubtedly be ready to relieve the Company by January 15.

The Memphis and El Paso Road desire to unite their interests with the Southern Pacific Road.

Annexed is a statement of the Revenue and Expenses of the Little Miami and Columbus and Xenia Railroad Company for the year ending 30th of November, 1858:

REVENUE.	
Passenger Receipts.....	\$132,673 03
Freight Receipts.....	614,358 29
Express and Mail Receipts....	53,167 97
	<hr/> \$1,200,499 29
EXPENSES.	
Repairs of Stationary Machinery	\$1,179 11
" Freight Cars.....	45,126 14
" Passenger Cars.....	23,297 63
" Locomotives.....	29,431 92
" Road.....	87,816 19
" Bridges.....	2,817 15
" Water Stations.....	982 68
" Depots.....	11,804 42
Fuel.....	77,756 61
Oil, Tallow and Waste.....	11,270 70
Books, Printing and Stationary.	8,067 25
Rents.....	2,016 95
Taxes.....	10,158 84
Loss and Damage.....	9,818 13
Transportation Expenses.....	218,642 27
	<hr/> \$669,937 21
Net earnings of the Road.....	\$630,512 08
Add dividends on Columbus and Xenia Stock, Dec., 1857, and June, 1858.....	43,290 75
	<hr/> \$673,802 83
Deduct Interest Account.....	\$105,838 75
Payment on last year's business.....	38,811 53
	<hr/> \$144,650 28
Net profits of the Company.....	<hr/> \$529,152 55
The Little Miami Co.'s proportion being....	\$332,568 37
And the Columbus & Xenia Co.'s ".....	176,584 18
	<hr/> D. G. A. DAVENPORT, Treas.

DINSMORE'S PUBLICATIONS.

RAILROAD GUIDE AND ROUTE-BOOK (established in 1830.) The only Type Guide always correct. Price, with maps, 25 cents. Cheap edition, 12 cents.

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Having had fifteen years experience in the business and having secured the best of workmen from the Car Factory in Cambridge, Mass., I feel confident that perfect satisfaction can be given in all work entrusted to our care.

We have now on hand the best of dry White-Cek with which we think we can build Cars as cheap and as well as any other establishment in the States.

Feb. 16/57

JOSEPH DAVENPORT.

Consulting Engineer.

THE subscriber has established his residence at the City of Washington, for the purpose of acting as Consulting Engineer in the preparation of plans and location of public works.

He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

CHARLES ELLET, Jr., Civil Engineer.
No. 25 B Street, Washington, D. C. april 2

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To Whom it May Concern.

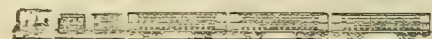
NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. His power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jr23-1m

Winter Arrangement.

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TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, B. & W. and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

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Leave Wheeling daily, at 12:20 P. M., and 10:26 P. M.

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Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

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9 A. M. and 11:30 P. M. via LITTLE MIAMI RAILROAD; connecting at Columbus with the CENTRAL OHIO RAILROAD.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

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Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:30 A. M., 2:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

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Leaves Indianapolis at 11:10 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonsville, Naples, La Salle, Illinois; and Burlington, Iowa.

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Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordville and the Terre Haute & Alton Railroads, for the West and South, as above.

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ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

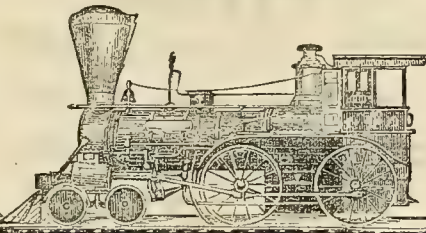
And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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1858 1858.

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Cincinnati, Hamilton & Dayton



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LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

8:00 A. M.—Richmond, Indianapolis and Chicago Express

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains east and west; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off.—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cleveline for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forrest for Chicago; at Clyde for Toledo; at Sandusky, with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:00 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.
From Dayton at 11:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

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JOHN ELLIS, Agent.
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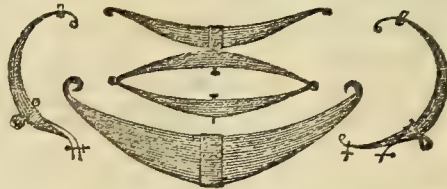
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May 19

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PASSENGER CARS of the finest finish; also all kinds of Freight Cars, Dumping Cars, Hand Cars, Wheels and Axles, Steel Springs, and in fact everything for the full equipment of a road.

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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

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SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—ly

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, DEC 23, 1878.

Railroad Record

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By WRIGHTSON & CO.

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¶ We have received several communications from sundry sources in relation to the letter of Mr. HYNSON, published in our issue of Nov. 11; as we published Mr. H's acknowledgment of its authorship in our last, we deem any further publication on the subject unnecessary.

LITTLE MIAMI RAILROAD.

ANNUAL MEETING.

The annual meeting of the stockholders of the Little Miami Railroad Company, was held on Tuesday last, when the following gentlemen were elected Directors, to serve during the ensuing year, viz:

Jacob Strader, Wm. B. Hubbard, Henry Hanna, R. R. Springer, John H. Groesbeck, Nathaniel Wright, John Bacon, Abraham Hivling, James Hicks, Jr., Larz Anderson, Alphonso Taft, and C. H. Kilgour.

Two changes only, have taken place in the Board—one occasioned by the death of John Kilgour, and the other by the withdrawal of Griffin Taylor. The new members are Henry Hanna and W. B. Hubbard.

Jacob Strader, Esq., who reluctantly accepted the Presidency of the Company upon the death of Mr. Kilgour, having positively declined a re-election, Nathaniel Wright, Esq., was chosen to fill the place. The Company were fortunate in the selection.

Other officers were re-elected as follows: D. G. A. Davenport, Treasurer; C. H. Kilgour, Secretary; John Durand, Superintendent; and S. E. Wright, Auditor.

No. 45.—VOL. 7.

CONDITION OF THE WESTERN RAILROADS;—IMPROVEMENT.

Our readers well recollect, that we have always maintained, that the Western Railroads, meaning more particularly, those of Ohio and Indiana, would eventually become the best kind of property, even to their Stockholders. This may, by some persons, have been set down to the score of exaggeration, or prejudice. Yet, after witnessing all the disasters of 1857-'8, the most disastrous probably, which can ever happen, we again repeat, that there is much *probability*, that our anticipations will turn out true. The Railroad improvements in business and profits, for the last three or four months, are obvious and encouraging. So much so, that many of the croakers begin to suspect they will be obliged to smile. We have never said, and of course could not be supposed to mean, that there were not some serious losses, and some important changes to take place, before the true value of Railroads could be ascertained. *Debts* were in some way to be liquidated; small improvements, which were nevertheless highly important, were to be made, before the present large investment in some of the Roads could be made available; roads had to learn, that a certain amount of business belonged to them, and should be cultivated; without going into an expensive competition for what did not belong to them, and finally, the most important of all things, a just economy had to be learned. Nearly all this has been accomplished, except some *improvements*, which if the Bondholders and Stockholders fully *understood the value of*, they would at once complete. We will mention some in Ohio, by way of illustration. The *Columbus & Piqua* Road was comparatively cut off from its proper business, unless it was extended to *Union*, where it would connect with the Western Roads. The parties interested had the good sense to see this, and they are now making the road to Union. That extension will double the value of the road.

In the same manner, it is obvious, the *Cincinnati and Wilmington* Road, loses a large part of its value, by being cut off at Morrow. If the proprietors had the common sense of those of the *Columbus* Road, they would contrive some independent entrance into Cincinnati. They propose the Glendale extension. This will do, *provided* their contract with the Dayton Road is such, that they can go in independently. A far better extension would be by the *TUNNEL*; that work, monied men have greatly underrated. We believe *half a million* would make it. The *Wilmington* Road alone would gain a million by it. If it controlled it, no road into Cincinnati would have half as good an entrance. But, it would be equally valuable to the *Marietta* and to the *L. Miami*; for if ever the *Tunnel* is made, every road from the North must come into the Tunnel. No one can examine the position of the Depot, near the corner of Broadway and Hunt streets, and the directness of the line, without seeing at once its superiority.

Again, the direct extension of the *Marietta* line to a connection with the *Baltimore* Road, and a Bridge over the Ohio, would add 50 per

cent. to the value of that road. There are *ten millions* of dollars more invested in it: and a *direct* line with the Bridge would cost less than the Bridge. The *value* added would be not less than three millions.

Again, the completion of the *Dayton and Michigan* Road would increase the business of the line from Cincinnati to Lima, now made, full 50 per cent. We say, that improvements like these *must* be made in order to make the original property valuable. We estimate the cost, and the improved value to be about thus:

	Cost.	Added Value.
Piqua Extension.....	\$ 300,000	\$1,000,000
Glendale Extension....	400,000	2,000,000
Marietta Extension and Bridge.....	1,000,000	3,000,000
Dayton and Toledo.....	1,500,000	3,000,000
Totals.....	\$3,200,000	\$9,000,000

We are much under the mark in the increased value; but, taking the above, the expenditures of \$3,000,000 on all these lines (of which one-half is on the unfinished *Dayton and Michigan*.) will bring *nine millions*. This is temptation enough. Now let us see how much property there is at stake, in this matter. It is something like this:

Columbus and Piqua.....	\$1,582,476
Cincinnati and Wilmington.....	4,882,372
Cincinnati and Marietta.....	10,857,647
Cincinnati and Toledo.....	7,399,281

There will be about 13 per cent on the whole property involved to complete the improvement. The great *difficulty* is, that this property is held in *unequal rights and proportions*, and therefore, there is a continual obstacle to uniting it in a common effort. Nevertheless, if this common effort be not made, half this property has to be lost. Here is a case for a real financier. Surely, the interest of *all* parties in such roads, is to unite. Suppose the Bondholders were to take the *Marietta*, or the *Wilmington* Road, what would they do? Can they pay their own interest better than the Company can? Will the 2d Mortgage holders let the first have the Road alone? Will the income Bondholders submit to a total sacrifice? A calm view of the matter will show, that nothing is to be gained by foreclosures. The opposite should be the course of conduct; the roads should be put in a condition to do their own legitimate business.

What we have said, is rather an introduction to what we *intended* to say. We intended to say, that since the 1st of October, most of the Roads in Ohio and Indiana, have been increasing their business. So far is this the case, that the aggregate receipts of all the roads in Ohio will for October, November, and December show a large advance on those of last year. The encouraging fact in this is, that this *increase* is in the face of a *general decline in the business of the country*. If, under such circumstances, there can be any increase of gross business, it is clear that the profits of the Western Roads would have been immensely advanced, had the general business of the country in 1858 been equal to that of 1856. Nor is that all; the great lesson of economy has been learned, and learned so effectually, that the *net receipts* are actually greater, when the gross business has been less. We have then, these facts, all indicating a healthier and better future for the Roads.

1. The *business* of the Roads is increasing rapidly, and their *net* receipts increasing, even under a general decline in the business of the country.

2. The *economy* of managing roads is so much better understood, that several roads are actually getting greater *net* receipts, with less business.

3. There is a *power* in three or four of the weakest roads, by *improvements*, to make them among the best in the country. Of course, if there is not sense enough in the owners of \$20,000,000 of property, to save that property, by a small advance, these things will not be done. But this does not apply to the other roads, which are in a healthy condition, and whose future profits are likely to realize, more than was even anticipated for them.

Thus, we see with the New Year, much hope for the depressed Stockholders in Railroads. We wish them a HAPPY NEW YEAR.

THE ATLANTIC, AND GREAT WESTERN RAILROAD.

Having observed the course of the newspapers for some time, we have come to the conclusion, that if this road has no other merit, it has, at least, that of being the *best abused road*, in the country. Why it should be so is not at first sight, very obvious. But, in looking to an article from Mr. Bowen, of Marion, the cause is not difficult to understand. This gentleman it appears, was a subscriber to the stock of the road, and finding stock of Railroads not quite so much above par, as in 1853, looks round to avoid his subscription. We *guess*, without knowing, that if every man, who has abused the road were looked after a little, he would be found a defaulting subscriber! Now, whether these gentlemen are right in their objections to paying up, or not, it hardly seems fair, to abuse the *road* (which they certainly thought a very good scheme when they subscribed,) because of their inability, or unwillingness to pay. We believe there were some *conditions*, as to work done, and stock subscribed, which, if the work goes on will be fulfilled. Hence these tears! We meddle not with this matter. But, on its *own merits*, we have ever considered the scheme a good one. There is one objection in the fact, that Ohio seems to have enough Easterly roads. But, on the other hand, if any capitalists think the scheme likely to be profitable, why should they not go on? Will it do the people of Ohio any harm to have money spent among them?

In fact, we have seen no evidence to contradict the original statement, that this road had received, in some form, capital enough to go on. If so, as it has considerable grading done, there is little doubt of its being at some time, accomplished. We say thus much, in sheer justice to a Company, which appears to have been rather hardly dealt with.

☞ The Cleveland, Painesville and Ash-tabula Road has declared a cash dividend of five per cent., and another of ten per cent. in Bonds.

THE AMERICAN CENTRAL RAILWAY.

MESSRS EDITORS:—My attention has been called to an editorial article in your number of December 16th, in relation to the Tiffin & Fort Wayne Railroad, which requires correction. While doing no more than justice to that road, in your representation of its good condition, and of the prudent management of its interests by its excellent President, Mr. R. G. Pennington, you have fallen into grave error as to other connecting links of what is known as the "*American Central Railway*."

You describe the route of the American Central as extending westward from Fort Wayne "to Chicago, and thence *via* Lacon and Oskaloosa to Council Bluffs." This is confounding the work, in part, with the Pittsburgh, Fort Wayne & Chicago R. R.; and mistaking its peculiar character and merit as a *great, continuous, straight, and due East and West line*.

The *American Central* has no relation to any Chicago route. The links, westward from Fort Wayne, are the "Fort Wayne Western," extending to the western boundary of Indiana; "The Western Air Line," across the State of Illinois; and "The Philadelphia, Fort Wayne and Platte River Air Line," through Iowa to the Missouri river at Council Bluffs. The towns, Rochester and Rensselaer, in Indiana—Lacon, Galva and New Boston in Illinois—Wapello, Washington and Oskaloosa, in Iowa, are points on this long line; and a glance at the map will show how both east and west of Fort Wayne, throughout its entire length, it is almost an air line, running, nearly with the parallel of 41 deg. N. latitude, across the four States, Ohio, Indiana, Illinois and Iowa. In Illinois this road crosses the Chicago Branch of the Illinois Central R. R. at a point about fifty-eight miles from Chicago, near Kankakee city. Throughout almost the whole distance, keeping upon the plateau or middle table land, between the waters that discharge northward into the lakes, and the sources of the streams that run south into the rivers of the Gulf, this great route traverses one of the finest grain and cattle producing regions of the Northwest. But it is not my purpose to enlarge upon the character of the enterprise. I desire only to set you right, by correcting the mistake into which you have inadvertently fallen, in your notice of one part of this work. And nobody perhaps can more appropriately do this for you.

I am President of the two Railroad Companies (the Fort Wayne Western and the Western Air Line), which are constructing that portion of this line which is between Fort Wayne and the Mississippi river. We are proceeding as yet slowly, but we hope surely—the completion of the whole road being, as we believe, but a question of time. The Companies have issued no bonds as yet;

intending to adhere to the policy of contracting no debt except such as will be exclusively for the purchase of rails and equipment. With their local means, consisting of individual and county subscriptions, they are proceeding gradually with the work in Illinois, having now nearly one hundred miles of the road bed finished in that State; and in Indiana the whole is under contract, and the grading done from Rensselaer eastward to the crossing of the New Albany & Salem R. R., with a prospect to the contractor of resuming operations rigorously in the coming spring, and going forward without further delay or interruption. In Iowa some miles of grading the dearest of their work, next to the Mississippi river, has been done; and the masonry for a fine bridge over the Iowa river at Wapello, I understand, is nearly completed.

If the construction of the Atlantic & Great Western Railroad should become, as appears very probable now, "a fixed fact," with its wide track extending from New York to St. Louis, the various roads composing the *American Central* may also adopt, as is proposed to them, the broad gauge. The intersection with the Atlantic & Great Western will be at a point near Akron in Ohio; and thus, east of the Mississippi alone, there would be added a branch five hundred miles long to that magnificent scheme. In the mean time, looking to that or another eastern outlet, the work on Mr. Pennington's part of our line, in this State, is progressing eastward from Tiffin as you have already noticed.

Respectfully, ROBERT C. SCHENCK.
Dayton, Dec. 20, 1858.

☞ We learn that the affairs of the Ohio Life Insurance and Trust Company are to be compromised,—Bell & Grant and Spining & Brown having agreed upon a general basis of settlement without the further interference of the Courts, so far as the assets now in the hands of the Sheriff are involved. All the details have not been yet arranged, but the propositions submitted at the last meeting of the creditors will be adopted in the main. This will prevent much costly litigation, and, perhaps, insure the creditors a small dividend,—one of these days.

☞ Gov. R. P. Lowe, of Iowa, being strongly importuned by various parties interested in the State Aid project, to call the Legislature together for the purpose of loaning the credit of the State to various proposed lines of Railroads,—declines to act in the manner urged.

The Milwaukee and Mississippi Railroad Company have been released from the attachment placed upon their funds at Milwaukee at the suit of its floating debt creditors.

MOBILE & GREAT NORTHERN RAILROAD.

LETTER FROM LEWIS TROOST, ENGINEER. SHOWING THE FEASIBILITY AND IMPORTANCE OF THE ENTERPRISE.

MOBILE, Aug. 14, 1853.

Lewis Troost, Esq.,

DEAR SIR:—In a recent conversation with you touching the Mobile and Great Northern Railroad Company, chartered by the Legislature of Alabama, in 1856, to connect with the Alabama and Florida, and Alabama and Tennessee River Railroads, you gave me some items from notes in your possession, which are important as showing the feasibility of these connections, and their value to Mobile when perfected.

The citizens of Mobile are fully awakened to the necessity of intersecting these railroad lines, if our city would maintain her present pre-eminence, or achieve the greatness which is within her grasp, and when it shall be understood that the connection can be made without difficulty, simultaneously with the completion of the road from Montgomery to Pensacola, and at a moderate expenditure in comparison with the importance of the work to Mobile—there is little doubt but that it will be done.

It is intended to organize the "Mobile and Great Northern Railroad Company" as soon as the return of our citizens and the opening of the business season shall make it practicable—and, as one of the Corporators designated by the Legislature for that purpose, I would thank you, if convenient, to arrange in form for publication, the leading features of the enterprise, in order that more general information may be disseminated upon the subject. Very respectfully,

Your obedient servant,

FRANCIS B. CLARK.

MOBILE, Aug. 28, 1853.

F. B. Clark, Esq.,

DEAR SIR:—I have the honor to acknowledge the receipt of your letter of the 14th inst., in which, as one of the corporators of the Mobile and Great Northern Railroad Co., you express a desire that I would sketch for publication the leading features of the enterprise, in anticipation of a projected organization of the Company. In compliance with your request, I submit the following:

An inspection of a Railroad Map of the United States will show that the Alabama & Florida Railroad, extending from Montgomery to Pensacola, the Mobile and Girard Railroad, and the proposed railroad from Savannah via Albany and Eufaula; and that the Alabama and Tennessee River Railroad, with its projected Southern extension, the Selma and Gulf Railroad, are respectively the terminal railroads in Alabama of two vast systems of railroads which commence beyond the limits of the United States on the North and East, and pass through all the Northern, Eastern, Middle, and some of the Western States. To connect the city of Mobile with these two systems of Railroads, and thus to make it their terminus on the Gulf of Mexico, is the object of the Mobile & Great Northern Railroad.

This enterprise, so important to the city of Mobile, can be effected by two different plans of operations, which may be stated as follows:

1st. By constructing about 85 miles of railroad in a northeast direction from Mobile,

TABLE No. 1.

ROUTES.	NAMES.	LOCATION.	Condition			Length of Railroad, Miles.	CITIES AND TOWNS.	Distances from Mobile, Miles.
			In operation.	In progress.	Not commenced.			
Mobile to Savannah via Eufaula & Albany	Mobile & Great North'n R. R. and projected R. R. to Eufaula Southwest., Albany & Gulf R.	From Mobile to Eufaula..... Eufaula to Savannah.....	74	32	215 162	215 268	Eufaula..... Savannah.....	*215 *483
Mobile to Savannah via Columbus and Macon.	Mobile & Great North. R. R. and Mobile & Girard R. R. Muscogee & S'thwest'n R. R. Central Georgia R. R.....	From Mobile to Columbia..... Columbus to Macon..... Macon to Savannah.....	40 100 191	24	171	235 100 191	Columbus..... Macon..... Savannah.....	*235 335 526
Mobile to Savannah via Montgomery, Columbus and Macon.	Mobile & G. Northern R. R. and Alabama & Florida R. R. Mont'y, W. P. & Muscogee R. Muscogee, Southwest. & Central Georgia R. R.....	From Mobile to Montgomery..... Montgomery to Columbus..... Columbus to Savannah..	30 92	16	122	164 92	Montgomery.... Columbus.....	*168 260
Mobile to Charleston via Montgomery & Augusta.	Montgomery & W. Point R. R. Atlanta & Lagrange R. R. Georgia R. R..... South Carolina R. R.....	Montgomery to W. Point West Point to Atlanta... Atlanta to Augusta..... Augusta to Charleston...	88 87 171 137			88 87 171 137	West Point.... Atlanta..... Augusta..... Charleston....	256 343 514 651
Mobile to Norfolk via Montgomery, Atlanta, Wilmington and Weldon.	South Carolina R. R..... Columbia Branch R. R..... Wilmington & Manchester R. R. Wilmington & Weldon R. R. Seaboard & Roanoke R. R.	Augusta to Branchville... Branchville to Kingville.. Kingville to Wilmington.. Wilmington to Weldon.. Weldon to Norfolk.....	75 43 171 162 80			75 43 171 162 80	Branchville.... Kingville..... Wilmington.... Weldon..... Norfolk.....	589 632 803 965 1045
Mobile via Montgomery and Atlanta to Richmond.	Petersburg R. R.....	Weldon to Petersburg....	64			64	Petersburg.....	1029
Washington, Baltimore, Philadelphia and New York.	Richmond & Petersburg R. R. Rich-Fred & Potomac R. R. Steamboat on Potomac river. Washing. branch B. & O. R. R. Phil., Wil. & Balt. R. R..... N. J. C. & O. & P. & T. R. R.	Petersburg to Richmond.. Richmond to Acquia Co. Acquia Co. to Washington Washington to Baltimore Baltimore to Philadelphia Philadelphia to N. York..	22 75 55 39 98 87			22 75 55 39 98 87	Richmond..... Acquia county.. Washington.... Baltimore..... Philadelphia... New York.....	1051 1126 1181 1220 1318 1405
Mobile via Montgomery, Atlanta and Dalton to Knoxville.	Western & Atlantic R. R....	Atlanta to Dalton.....	160			100	Dalton.....	443
Lynchburg and Richmond.	East Tenn. & Georgia R. R. East Tenn. & Virginia R. R. Virginia & Tenn. R. R..... South Side Railroad..... Richmond & Danville R. R.	Dalton to Knoxville..... Knoxville to Bristol..... Bristol to Lynchburg.... Lynchburg to Burkeville.. Burkeville to Richmond..	110 130 205 70 53			110 130 205 70 53	Knoxville..... Bristol..... Lynchburg..... Burkeville..... Richmond.....	553 626 891 961 1014
Mobile via Montgomery, Atlanta, Knoxville, Alexandria to Washington, Baltimore, Philadelphia, New York.	Orange & Alexandria R. R..	Lynchburg to Alexandria.	168			168	Alexandria....	1059
Boston, Portland, Bangor, Montreal and Quebec.	Washing. & Alexandria R. R. Wash'n branch of B. & O. R. R. Phil., Wil. & Balt. R. R..... N. J. C. & O. & P. & T. R. N. York & New Haven R. R. N. Hn., Hart. & Springfield Boston, Worc. & West. R. R. Boston & Maine R. R..... Androscooggin and Kennebec, Penobscot & Kennebec & Androscooggin R. R..... Grand Trunk R. R..... Grand Trunk R. R.....	Alexandria to Washingt'n Washington to Balt..... Baltimore to Philadelphia Philadelphia to N. York.. N. Y. to New Haven... New Haven to Springfield Springfield to Boston... Boston to Portland.... Portland to Bangor..... Portland to Montreal... Montreal to Quebec....	9 39 98 87 73 62 98 111 137 292 168			9 39 98 87 73 62 98 111 137 292 168	Washington.... Baltimore..... Philadelphia... New York..... New Haven.... Springfield... Boston..... Portland..... Bangor..... Montreal..... Quebec.....	1068 1107 1205 1292 1365 1427 1525 1636 1773 1928 2096

*Estimated.

which would make a connection with the Alabama and Florida Railroad, and by building a branch of about 35 miles, uniting with the Selma and Gulf Railroad; and by it with the Alabama and Tennessee River Railroad; and, also, by making a short branch to join the Mobile and Girard, and the railroad from Savannah, the length of which will depend on the location of these roads.

2d. By building a road from 96 to 100 miles, on the same route as that occupied by the road to the Selma and Gulf Railroad on the first plan, which will connect it with the Alabama and Tennessee River Railroad, and thence by extending it 26 or 27 miles to the Alabama and Florida Railroad, where it would be in a good position to meet the Mobile and Girard and the railroad from Eufaula.

A careful instrumental survey of the lines composing these two plans, will be necessary to decide which is the best. The ultimate cost of each will, I think, be found not to vary

greatly, in which case, that one which best subserves the interests of Mobile, should be adopted.

The railroad may be put in operation with a moderate expenditure of money, by first constructing that part of it extending from the east bank of the Alabama river to the Alabama and Florida and Selma and Gulf Railroads, and by temporarily employing steamboats on the river and bay of Mobile, for the remainder of the distance to Mobile.

One swift passenger steamboat, with an extra boat in reserve, two steamtugs, and with twelve freight barges, would be sufficient for the business of the line for several years, or until the road is continued to Mobile.

The railroad to be constructed would pass over a country favorable for railroad making, requiring neither expensive grading nor bridging, and abounding in timber of good quality. In the absence of instrumental surveys, it may be assumed that a good railroad (furnished with a T rail 57 lbs. to the yard on that

TABLE No. 2.

Railroads Composing the Routes.									Distance from Mo- bile, Miles.....
ROUTES.	NAMES.	LOCATION.	Condition.			Length of Rail- road, Miles..	CITIES AND TOWNS.		
			In operation- Miles.....	In progress, Miles.....	Not com- menced, Miles				
Mobile via Selma to Knoxville, Lynchburg, Washington, Baltimore, Philadelphia and New York.	Mobile & Great Northern R. and Selma and Gulf R. R..... Alabama & Tenn. River R. R. East Ala. & Georgia R. R.... East Tenn. & Georgia R. R.... East Tenn. & Virginia R. R. Virginia & Tenn. R. R..... Orange & Alexandria R. R.... Washington & Alexandria R. Wash'n Branch of B. & O. R. Phil., Wil. & Balt. R. R..... N. Jer'y, C. & A., & Phil. & T.	Mobile to Selma..... Selma to Jacksonville.... Jacksonville to Dalton.... Dalton to Knoxville..... Knoxville to Bristol..... Bristol to Lynchburg..... Lynchburg to Alexandria... Alexandria to Washington... Washington to Baltimore... Baltimore to Philadelphia... Philadelphia to New York	100 110 130 205 168 9 39 58 87	45 87	146 145 145 110 130 205 168 9 39 58 87	Selma..... Jacksonville.... Dalton..... Knoxville.... Bristol..... Lynchburg.... Alexandria.... Washington... Baltimore.... Philadelphia... New York....	*146 291 378 488 618 623 631 1000 1039 1137 1224		
Mobile via Selma, Gadsden and Chattanooga to Knoxville.	Alabama & Tenn. River R. R. Tenn. & C. & Wills Valley R. R. Chattanooga & Cleve'd R. R. East Tenn. & Georgia R. R..	Selma to Gadsden..... Gadsden to Chattanooga... Chattanooga to Cleveland... Cleveland to Knoxville..	100 91 30 83	67 91 30	167 91 30 83	Gadsden..... Chattanooga... Cleveland..... Knoxville.....	313 404 434 518		
Mobile via Selma, Montevallo, Decatur to Nashville, Terre Haute and Lake Michigan.	Alabama & Tenn. River R. R. Alabama Central R. R..... Do. Tenn. Southern Cent. R. R.... Tenn. & Alabama R. R..... Nashville & Hender'n, Edge- field & Kentucky R. R..... Evansville & Crawfords R. R. Terre Haute & Rich'd R. R.. New Albany & Salem H. R..	Selma to Montevallo.... Montevallo to Decatur.... Decatur to State line.... State line to Columbia.... Columbia to Nashville.... Nashville to Henderson... Henderson to Evansville... Evansville to Terre Haute... Terre Haute to Greencastle. Greencastle to L. Michigan.	55 48 11 32 143 109 34 150	27 115 11 143 10 109 34 150	55 115 27 46 143 109 34 150	Montevallo.... Decatur..... State line.... Columbia.... Nashville.... Henderson.... Evansville.... Terre Haute... Greencastle... Lake Michigan.	201 *216 243 391 434 577 587 696 730 880		
Mobile via Selma and Nashville to Louisville, Cincinnati, Cleveland, Dunkirk and New York.	Louisville & Nashville R. R. Louisville & Cincinnati R. R. Cleveland, Col. & Cin. R. R. Cleveland & Erie R. R..... Erie & North East R. R..... New York & Erie R. R.....	Nashville to Louisville... Louisville to Cincinnati... Cincinnati to Cleveland... Cleveland to Erie..... Erie to Dunkirk..... Dunkirk to New York...	31 27 235 95 47 461	154 73	185 100 255 95 47 461	Louisville..... Cincinnati.... Cleveland..... Erie..... Dunkirk..... New York.....	619 718 974 1069 1116 1577		
Via same and Buffalo, Albany to New York	Erie & North East R. R..... New York Central R. R..... Hudson River R. R.....	Dunkirk to Buffalo..... Buffalo to Albany..... Albany to New York....	40 298 150		40 298 150	Buffalo..... Albany..... New York.....	1156 1454 1604		
Via same and Albany to Boston.	Western R. R.....	Albany to Boston.....	200		200	Boston.....	1654		
Mobile via Selma Nashville and Cincinnati to Baltimore.	Marietta & Clev. & Branch R. B. & O. & North Western R.	Cincinnati to Parkersburg Parkersburg to Baltimore.	180 383	16	196 383	Parkersburg... Baltimore.....	915 1398		
Mobile via Selma Nashville, Cincinnati and Pittsburg to Philadelphia.	Little Miami & Columbus R. Steubenville & Indiana R. R. Pittsburg & Steubenville R. Pennsylvania R. R.....	Cincinnati to Columbus... Columbus to Steubenville... Steubenville to Pittsburg... Pittsburg to Philadelphia.	120 117 42 353		120 117 42 353	Columbus..... Steubenville... Pittsburg..... Philadelphia...	639 956 998 1351		
Mobile via Selma Nashville, Cincinnati, Niagara Falls to Toronto, Montreal and Quebec.	Buffalo, Niag. F. & Lewiston Great Western R. R..... Great Western R. R..... Grand Trunk R. R..... Grand Trunk R. R.....	Buffalo to Suspension B'de Suspension B'de to Hamilton. Hamilton to Toronto.... Toronto to Montreal.... Montreal to Quebec.....	28 43 28 333 684		28 43 28 333 168	Suspension B'dge Hamilton..... Toronto..... Montreal..... Quebec.....	1164 1227 1265 1598 1776		

*Estimated.

part of the line comprised between the river and the Selma and Gulf railroad, and with a T rail 50 lbs. to the yard on that part of it extending thence to the Alabama and Florida Railroad, properly fastened on cross ties, can be built through this country and make the required connections at the present prices of labor and materials, provided means are promptly supplied as wanted,—

For.....	\$961,000
Add for equipment with which to commence business.....	173,000
And for two passenger steamboats and two steamtugs with twelve freight barges.....	116,000

Makes the probable cost of connecting Mobile with the Alabama and Florida, and Selma and Gulf Railroads by railroad and steamboat.....\$1,250,000

Experience has, however, demonstrated that no compound line, composed of railroad and steamboat, should be adopted on important routes where it is practicable to have a

through railroad line. In this case, it is suggested only as a temporary expedient, to be dispensed with whenever means can be procured to construct a continuous railroad to Mobile.

There are really no engineering obstacles to prevent the construction of a railroad from the east bank of the river across the delta into the city of Mobile.

The assertion is ventured that a good railroad, with a T rail 57 lbs. to the yard, can be made on this part of the line—

For.....	\$621,000
The additional equipment in locomotives, cars, stations, etc., may be estimated at....	187,000
Add the probable cost of the Montgomery and Selma connections.....	1,250,000
Deduct half the cost of the steamboats and barges, which will be sold when the railroad is completed to Mobile.....	58,000

Makes the total probable cost of the Montgomery and Selma connections, equipped for business and terminating in this city.....\$2,000,000

Annexed are tables No. 1 and 2, showing the two grand systems of railroads with which Mobile will be connected by the Mobile and Great Northern Railroad.

Table No. 1 exhibits the Eastern system, passing through Montgomery, etc., the various routes formed, the railroads composing the routes, with their localities and condition, (that is, the number of miles in operation, in progress and not commenced,) and the cities and towns placed in connection with and their distances from Mobile. Table No. 2 shows the Northern system via Selma, etc., in like manner.

These tables demonstrate the great importance to Mobile of the Mobile and Great Northern Railroad. The two great systems of railroads connected by it with Mobile, embrace a domain extending eastward from Mobile to the Atlantic, and northward and along the eastern shore of Lake Michigan to its northern boundary, and thence eastward to the Atlantic, containing an area of 645,000 square miles of the most populous and wealthy sections of the United States and Canada. Their aggregate length, with the railroads in this domain in connection, passing through and uniting all its principal cities and towns, is upwards of 22,000 miles.

The Mobile and Great Northern Railroad will, therefore, become a route of travel through Mobile, between the countries traversed by these railroads, and those to the west and south, Texas, California, the regions of the Gulf of Mexico, Caribbean Sea, and the South Atlantic and Pacific Oceans; and for a great part of their tributary travel, it will present one of the most direct and expeditious routes.

It will also afford an outlet to foreign and domestic ports, through Mobile, for the productions of large portions of Alabama and Tennessee, and parts of Georgia, Kentucky, Ohio, Indiana, and Illinois, and the channel by which their supplies will be received.

A railroad so favorably situated can not fail to prove a profitable enterprise.

The following estimate of business and income of the road, predicated upon the present resources of the countries interested in it, is submitted as the result of its second year's operation after its completion, supposing that the Alabama and Florida and the Selma and Gulf railroads are built, of which there is little doubt.

The business of the road will be derived from the transportation of passengers, freight and mails.

1st. *Passengers.*—Thirteen years ago, the travel on the Mississippi river, north and south, was estimated at 450,000, and that on the Alabama river 100,000, per annum, most of which belonged to the country traversed by the above roads. Since then, the settlement of Texas and California in the west, and the increase of population in the east and north, with the greater facilities and economy of traveling, have greatly augmented these numbers. It would not be too much to say that this annual migration now amounts to 800,000, distributed, however, between more routes. Of this, there can be no question, that a very large amount of travel exists in this direction, and that the Mobile and Great Northern Railroad, being on the principal route which commands it, will receive a fair proportion.

In the estimate of business of the road, to be very moderate, the assumption is made, that its proportion, including the way travel

The benefits which will be realized by Mobile from these steam lines in connection with her railroads are incalculable. The region rendered accessible by the steam lines afford the best markets for the manufactured articles and provisions of the country traversed by her railroads, while they furnish in return the very articles, sugar, coffee, etc., mostly in demand. An extensive commerce will thus spring up from this exchange of productions. Mobile will no longer be the mere commission house of one staple article only for foreign and domestic ports, from which the vessel of the carrier returns in ballast, and for which business she has attained a maximum of population and means, but she

will, in addition, become the assorting and distributing city of many staple articles for the consuming millions of the south Atlantic and Pacific oceans, and of the products received in exchange for the supply of the south and west tributary to her railroads. With the new roads of commerce thus opened, Mobile must greatly increase in wealth and population, probably more than fifty per cent. in five years.

While the many advantages of Mobile as a sea port have been admitted, objections have been urged for the want of a sufficient depth of water in her harbor.

The least depth of water over the outer bar at the entrance of Mobile bay into the Gulf of Mexico is $19\frac{1}{2}$ feet; thence the channel to the lower ship anchorage in the bay has depths ranging from 23 to 40 and 54 feet. The lower ship anchorage is very capacious, land-locked and well protected with $19\frac{1}{2}$ feet water. Thence to the anchorage of the upper fleet, the soundings vary from 17 to $12\frac{1}{2}$ feet, and thence to the wharves of the city of Mobile they are from 8 to 10 and 16 feet. The plane of reference of these soundings is mean low water.

Examinations have been made by the U. S. Engineer-Department of the practicability of deepening the approach to the city, from which it appears that the channel can be deepened to sixteen feet at a cost of 750,000 dollars. The work being practicable and its cost trifling, when compared with the results to be attained, it evinces on the part of the General Government a culpable neglect of the interests not only of Mobile and Alabama, but of the south and west, that Mobile harbor has not been improved long ago. Years may elapse before this duty of the General Government is performed, but this will not prevent the immediate establishment of steam lines to load at the wharves of the city.

The improvements which have been made in the models and materials of sea-going steamers, have led to the construction of capacious vessels, capable of navigating the seas with speed and safety, drawing from six to ten feet water. Heretofore the models of sea steamers were made on the same principles as sailing vessels, long, narrow and deep, drawing from 18 to 22 feet, and when loaded with coal, incapable of carrying much freight, and when light from the use of coal, very crank and wanting in stability. Now, however, steam sea-going vessels are made with greater beam and less depth of hold, with greater length, drawing from 6 to 12 feet when loaded for the sea, and are much more capacious and steadier, and safer in gales of wind than the old vessels.

On Lake Erie, where gales of great severity and heavy seas are experienced, the steamers are from 2 to 3,000 tons burthen, drawing from 9 to 10 feet water.

The following table exhibits the draught and tonnage of thirty-three steamers employed in the steam mail line of England:

No. of steamers.	Draught.		Tonnage.
3 Steamers.	6 ft.	to 6 ft. 6 in.	250 to 307 tons.
5 "	7 ft.	to 7 ft. 6 in.	308 to 443 "
6 "	8 ft. 4 in.	to 8 ft. 11 in.	418 to 685 "
2 "	9 ft.	to 9 ft. 6 in.	640 to 654 "
1 "	10 ft. 8 in.		1132 "
3 "	11 ft. 2 in.	to 11 ft. 10 in.	409 to 765 "
3 "	12 ft. 6 in.	to 12 ft. 10 in.	354 to 1189 "
6 "	13 ft.	to 13 ft. 10 in.	782 to 1427 "
4 "	14 ft.	to 14 ft. 11 in.	1693 to 1400 "

To sum up: the Mobile and Great Northern Railroad will place Mobile on the direct line

of an immense trade and travel; it will connect her with upwards of twenty-two thousand miles of railroad, of which over 9,000 converge to Mobile from all parts of the United States and the British Provinces, East and North, and make her the focus of their business on the Gulf of Mexico; with one of its arms and its connections it will form a grand trunk line north and south, intercepting every road running from the Mississippi to the Atlantic, and making them serve as feeders; and with the other arm and its connections it will unite with every seaport on the Atlantic from Savannah to Portland. Finally it will afford the means of constant and rapid transportation to the Gulf, through Mobile, of the cotton and Minerals of Alabama, and the provisions, breadstuffs and manufactures of Tennessee and Kentucky, and of the teeming West north of the Ohio, and will be the channel for distributing the supplies received in exchange, among which will be found the products of Texas and the West Indies, and at no distant day the coffee of the Brazils, the gold of California, and the teas and silks of China.

An enterprise conferring such benefits upon Mobile should be put in operation at almost any cost. But its construction is not advocated for these reasons alone. There is an absolute necessity for this road, if we look only to the preservation of the trade and travel at present enjoyed by Mobile, to say nothing of the large increase of both, which may be confidently expected on the completion of the proposed scheme for a connection with Montgomery and Selma, and the systems of roads with which they are, or soon will be, connected. It requires no calculation to show that Mobile, without the Mobile and Great Northern Railroad, must lose immensely by the construction of the Alabama and Florida and the Selma and Gulf railroads; while by a timely connection with them, they will both become very largely tributary to Mobile, as has been shown above. I repeat, therefore, that the Mobile and Great Northern Railroad is not merely something to be greatly desired, but that it is an absolute necessity to Mobile. With these improvements completed, forming a union by the shortest route with the north, north-east and east, including all the important cities in these directions, and with her North-western Railroad, the position of Mobile will be strong and impregnable.

The connection with the Alabama and Florida and the Selma and Gulf Railroads should furthermore, be made without delay, before the business done to Mobile shall have time to become accustomed to adverse channels. It will be far easier to retain business than to recover it after it shall have been taken away. This all know, who have watched the course of trade, and who are acquainted with the laws by which it is controlled.

I am warranted in stating that the Mobile and Great Northern Railroad, east of the Alabama river, connecting with the Alabama and Florida and the Selma and Gulf Railroads, can, with means provided promptly as required, be built, and the line to Mobile opened with steamboats, in eighteen months from the commencement of the work.

Very respectfully,

Your obedient servant,

LEWIS TROOST.

Travelers can now go from New York to New Orleans, in three days.

IRON FOR THE PACIFIC ROAD.

A Pacific Railroad Bill is likely to run the gauntlet between opposing political interests, party jobbers, and double-faced friends, till it is cheated of its fair proportions, and distorted with excrescences that will leave their scar forever. All these kicks and bruises and stabs in the back will delay the completion of a Pacific Railway, and modify its usefulness, but they will not kill it. There is an enemy, however, lurking unseen in the very souls of its friends, and already putting words into their mouths, which is able to transform the whole enterprise into a public disgrace. It is their engineering—the civil and mechanical engineering of politicians, lawyers and merchants. The history of Railways all over the world is a history of money fearfully sacrificed because it was not wisely laid out. There has never been an approximation to the possible success of a Railway as a money-making institution, till millions have been literally scattered to the winds by engineers who were not engineers, but quacks.

Should a Pacific Railway, built and equipped in the best and most truly economical manner known, under the meridian blaze of the long history of those successive steps, waste, bankruptcy, reform, experiment, and practical engineering truth attained at last—should such a railway merely pay its expenses, and the interest on its cost—and it is not likely to do more for a long period of years—then a railway built as twenty thousand miles have been built in this country, will not pay its expenses, but will be an unmitigated drag on a treasury already worse than empty, to the extent of millions of dollars a year. There are facts enough on record to establish this conclusion, viz.: if the Pacific Railway is built in the best known manner, its working expenses will be at least *one-half* what they will be if it is built as American roads are generally built—the cost being the same in both cases. If the people desire to have this balance of loss wrung out of them by taxation, they are likely to be gratified to the most unbounded extent, provided the Pacific Railroad bill does not contemplate some new and vital features which have never yet guided the construction of American roads.

For example: What rails shall be used? Whether or not they shall be of American make is a question of political economy, and not necessarily of railway economy. Mere names lead to fictitious distinctions. The American is generally superior to the English iron in use on our roads, and American ores are generally stronger than the ores of Great Britain, hence we jump to the conclusion that American rails only are good. Now, it so happens, *per contra*, that some of the very poorest rails in this country are of American make, and that the British rails used in England, are far superior, as a class, to the American rails used in the United States. It is as absurd to estimate American and English ores in classes, as to estimate American and English soil or stone in classes; the best and the worst known exist in both countries. Besides, ore is not rails. The origin of the iron is not the issue. Considered by itself, it will be of no practical consequence to the Pacific Railroad, considered as a railroad, and not as a political machine, whichever way it turns out. Congress may dispute about it till doomsday, and not come within hailing distance of the remotest feature of a plan by which to secure good rails.

Rails that last from ten to fifteen years, instead of crushing out in as many months, embrace, at least, these qualities: The greatest possible lateral cohesion in the head; a fair amount of surface hardness in the tread, (they harden by use, if properly made;) a degree of elasticity in the flanges of the head, (this incidentally allows the proper section for jointing

the rail firmly,) and great tenacity in the foot. To furnish a permanently level surface for the wheels, instead of a surface which will deflect between supports, and keep them running up a heavy grade, rails must be much higher, though not necessarily heavier, than the common American pattern. It is well known to almost everybody, except the buyers of railroad iron, that a rail six inches deep is not only twice, but almost eight times, as stiff as one three inches deep, and that good iron can be very much lighter than the present standard, in many parts, to allow this great height within the ordinary limits of weight. There is a rail used in this State which weighs 84 pounds per yard. At the cheapest price of the meanest iron known, this rail costs as much per mile as would a 58-pound rail of the same stiffness, and at least three times the durability, made from the best material in the best known manner.

Hence it appears, that the making of good rails is not a question of English or American iron, but of *shape* of section and *process* of manufacture. It is not a question in political economy, but in physical science. And the difference in the cost of working the Pacific Railway, solely due to the quality of the rails, will be millions of dollars a year saved or sunk.

During a period of thirty years, enormous sums of money have been spent in ascertaining how, and in what shape, to make good rails. These experiments have brought forth the most important results. They show that the rail must be of originally good iron, that the cinder must be thoroughly expelled as from the purest merchant bar, that it must be worked out in the process of welding—for iron without plenty of cinder will not weld soundly; hence the "pile" from which the rail is drawn must be originally large. The poorest rails are reduced in rolling from about 5 to 1; the best from 12 or 13 to 1. New processes are perfecting which will give still greater firmness to the head, and prevent that leading feature of its destruction, that is, lamination. One promising the best results is the forcing into the head of the rail an extra quantity of iron, purposely left by the ordinary process on the tread.

The reason why so many of our railways are cursed with poor iron, is simply because their managers do not try to get better iron. They order rails of a given section; if a light section of poor iron has broken down before they put in more of the same kind, it never occurs to them to put in less of a better kind. No specification is given, no inspection is exercised, and no further care is taken. The rails are put down. Perhaps they are iron; perhaps they are cinder; they cost less per ton than any before heard of! that's certain. In two years they are in the scrap-heap. What then? "Our rails are costing too much," say the Management, "we must have them cheaper." So the next lot gets 20 per cent more cinder. And so on.

Rails that last ten years and more are made according to the most rigid and particular specifications, under the personal inspection, at the mills, of competent engineers, and tested in the most thorough manner. All that do not come up to the mark exactly, are rejected. One of the last and best specifications for English rails (the Eastern Counties Railways) provides that if the rails begin to fail within three years from the commencement of their service, they shall be replaced with sound rails at the maker's expense. And such rails do not cost more per mile than a great many of heavier pattern, while they will last several times as long.

Perhaps these engineering details are beneath the scope of the National Congress. But the National Congress must recognize and insist on these details, or they will curse the national highway. There are men enough who will

guarantee to work the Pacific Railroad for two-thirds the average cost of working American roads, if they can direct its building and equipment. They would stake their lives on the issue, for there would be no risk.

We are about to undertake the construction of a great national work. Its commercial success, wherever it may be located, and of whatever materials it may be built will be of the highest advantage to the American people; for if its cheap working will allow low rates of transportation, it will open to rapid civilization and enterprise, a vast, rich and magnificent region, and connect the two oceans with that golden bond, cheap, rapid and safe intercommunication. The eyes of all the world will watch the issue. To-day, the miserable condition and enormous working cost of American roads, as a class, is a by-word and a reproach all over Christendom. The national honor, as well as advantage is at stake. Nothing is yet done to be undone. The field is clear; there is time to begin properly. If there is money enough to build the road at all, that money can build it right.

If the Pacific Railway is built as well as the best Engineers know how to build it, it will be the grandest and best public improvement in the world, pouring life and wealth and happiness into a boundless wilderness, and outstripping, as a triumph of mind, the proudest monuments of history and fable. But if it is built according to the present American models, it will be a public disgrace, a remorseless leech upon the treasury, and to a greater or less degree, a nuisance to everybody concerned in and about it. We can not afford to have a poorly built Pacific Railroad.—*New York Times*.

The following article is taken from the *Economist*:

BRITISH WOOLEN TRADE.—At a recent meeting of the "British Association," Mr. E. Baines read a very valuable paper on "The Woollen Manufacture of England." In 1799, the British imported 2,263,000 pounds of foreign and colonial wool, and in 1857, 127,000,000, of which 90,000,000 was retained for home consumption and the rest exported. "The total value of the woollen and the worsted goods and yarn exported last year was £1,364,500; it having been much checked during the last ninety years by the introduction of the cotton manufacture, of which, in goods and yarn, £38,298,000 worth was exported last year." He thought it not safe to assume that there were more than 150,000 operatives engaged in the woollen trade and 125,000 in the worsted trade, making 275,000 together, while the total number of persons directly dependent upon the trade might be set down at 837,500, (including the workers,) there being a larger number of dependent workers in auxiliary trades than in connection with any other manufacture, raw cotton and silk being wholly imported, and flax very nearly so. The wages of those engaged in the woollen manufacture would average 12s. 6d. a week for each man, woman, and child, making for the 150,000 workers £4,875,000 a year.—The annual value of the woollen manufacture of the Kingdom might be thus stated, and certainly with the reliance that the figures were not excessive:—Foreign and colonial wool, 79,903,000 lb, worth £4,717,000; 80,000,000 lb of British wool, £5,000,000; 80,000,000 lb shoddy, at 2½d., and 15,000,000 lb mungo, at 4½d., worth £609,000; cotton and cotton warps, £206,000; making about ten-and-a-half millions sterling for materials. Then there came dye wares, oils, and soap, £1,500,000; wages, £4,875,000; rent, wear and tear, interest, profit, &c., £3,381,000; making a grand total of £20,190,000 as the value of the woollen manufacture of the Kingdom. The paper occupied an hour and three-quarters in reading, and Mr. Baines referred, in illustra-

tion, to nearly a score of elaborate tables. Amongst many other things dwelt upon, Mr. Baines minutely explained the peculiarities of the trade of the three districts united to form "the Leeds clothing district." He especially described the origin and growth of the shoddy and mungo trades, of which Batley is the centre; and he argued that—fairness of dealing being of course implied—those trades were in almost every sense an advantage, especially for their making again useful cloth of rags once thrown aside as useless.

COINAGE.—The Directors of the United States Mint reports a very large amount of silver coinage for the fiscal year 1858, being no less than \$8,233,287, for the fiscal year ending with June 30, 1858. The amount of silver coinage for several years has been as follows: 1855, \$3,501,245; 1856, \$6,135,240; 1857, (6 months) \$1,601,644; 1858, \$8,233,287. The coinage of the past year was greatly accelerated by the hard times. Of this coinage in 1858, \$3,237,000 was at New Orleans, and the remainder at Philadelphia, where the mint continues very active in producing silver coins, which have consequently become a drug. These coins are of the depreciated standard under the mint bill of 1853, and the whole coinage now under that bill amounts to \$37,743,947 in coin.

MISSOURI LEGISLATURE.

The Legislature was permanently organized by the election of Mr. Coffey, Democrat, as Speaker, and Mr. Mosely, Clerk of the House, and Mr. Hough, Secretary of the Senate.

The Governor's message says that the amount received into the Treasury for two years ending October 1, was \$1,361,000, and the expenditure for the same time were \$1,132,000.

Speaking of railroads, the Governor says that the amount loaned by the State to various companies is \$24,950,000; bonds issued, \$19,056,000; amount due, \$58,940,000.

The Hannibal and St. Joseph Road has exhausted the aid granted, but asks no further assistance from the State. The completion of the Pacific Road to Kansas City demands additional aid, which the Governor hopes will not be withheld.

The North Missouri and Iron Mountain Roads have declared their inability to pay the interest on the State bonds on the 1st of January. This failure involves the sale of those roads at auction; but the consideration of the early completion of the North Missouri Road to the intersection of the Hannibal and St. Joseph Road, which will place it upon a paying basis, and the limited business of the Iron Mountain Road, and the inability of the Company to derive benefit from the balance due from the State under the restriction act of the last Legislature until March 1, the Governor advises, instead of selling the defaulting roads, measures be taken to assure the State of a faithful application of the receipts of those companies to their legitimate purposes, and they be allowed to go on until a fair opportunity for them to test their ability to pay.

The geological survey is progressing rapidly, and is disclosing exhaustless quantities of iron, lead, copper and coal.

¶ We have a copy of the usual semi-annual Circular of the Michigan Central Railroad Co., which gives the result of the year's traffic, as we have before indicated, at about 3 per cent. on the capital stock. The receipts for the six months ending 30th November, were.....\$1,114,620 01
Operating expenses..... 571,790 34

Balance.....	\$542,829 67
Interest.....	\$383,965 92
Sinking Fund.....	60,000 00— 443,965 92
Net earnings for six months.....	\$98,863 75
Add balance to credit of income account 1st June, 1858.....	87,418 67
Total.....	\$186,282 72

FACTS ON GOLD.

Gold, next to iron, is the most widely diffused metal upon the surface of our globe. It occurs in granite, the oldest rock known to us, and in all rocks derived from it; it is also found in the vein stones which traverse other geological formations, but has never been found in any secondary formation. It is, however, much more common in the alluvial grounds than among the primitive and pyrogenous rocks. It is found disseminated under the form of spangles in the silicious, argillaceous, and ferruginous sands of certain plains and rivers, especially in their junction, at the season of low water, and after storms and temporary floods. It is the only metal of a yellow color; is readily crystallizable, and always assumes one or other of the symmetrical shapes, such as the cube, or regular octahedron. It affords a resplendent polish, and may be exposed to the atmosphere for any length of time without suffering change; it is remarkable for its beauty; is nineteen times heavier than water, and, next to platinum, the heaviest known substance; its malleability is such, that an ounce will cover two hundred square feet; its ductility is such, that a lump of the value of four hundred dollars could be drawn into a wire which would extend around the globe. It is first mentioned in Gen. ii., 7. It was found in the country of Havilah, where the rivers Euphrates and Tigris unite and discharge their waters into the Persian Gulf. The whole quantity of gold which has been extracted from the surface and bowels of the earth, from the earliest times to the present day, is estimated to be nine thousand millions of dollars.

The relative value of gold to silver, in the days of the patriarch Abraham, was one to eight; at the period of B. C. 1000, it was one to twelve; B. C. 500, it was one to thirteen; at the commencement of the Christian Era, it was one to nine; A. D. 500, it was one to eighteen; A. D. 1100, it was one to eight; A. D. 1400, it was one to eleven; A. D. 1613, it was one to thirteen; A. D. 1700, it was one to fifteen and a half; which latter ratio, with but slight variation, it has maintained to the present day.

Gold was considered bullion in Palestine for a long period after silver had been current as money. The first mention of gold money in the Bible is in David's reign, (B. C. 1056,) when that king is said to have bought the threshing floor of Ornan for six hundred shekels of gold by weight. In the early period of Grecian history the quantity of the precious metals increased but slowly; the circulating medium did not increase in proportion with the quantity of bullion. In the days of early Greece, the precious metals existed in great abundance in the Levant. Cabul and Little Thibet (B. C. 500) were abundant in gold. It seems to be a well ascertained fact that it was obtained near the surface; so that countries which formerly yielded the metal in great abundance are now entirely destitute of it. Croesus (B. C. 560) coined the golden *stater*, which contained one hundred and thirty-three grains of pure metal. Darius, son of Hystaspes, (B. C. 538) coined *darics*, containing one hundred and twenty-four grains of pure gold, which were preferred, for several ages, throughout the east for their fineness. Next to the *darics*, were some of the reigns of the tyrants of Sicily; of Gelo, (B. C. 491,) of Hiero, (B. C. 478,) and of Dionysius, (B. C. 404;) specimens of the two former are still preserved in modern cabinets. *Darics* are supposed to be mentioned in the latter books

of the Old Testament under the name of *drams*. Very few specimens of the *daric* have come down to us; their scarcity may be accounted for by the fact that, after the conquest of Persia, they were melted down under the type of Alexander. Gold coin was by no means plenty in Greece, until Philip of Macedon had put the mines of Thrace in full operation, about B. C. 350. Gold was also obtained by the Greeks from Asia Minor, the adjacent islands, which possessed in abundance, and from India, Arabia, Armenia, Colchis, and Troas. It was found mixed with the sands of the Pactolus and other rivers. There are only about a dozen Greek gold coins in existence, three of which are in the British Museum, and of the later two are *staters* of the weight of one hundred and twenty-nine grains each. About B. C. 207, gold coins were first struck off at Rome, and was denominated *aurei*, four specimens of which are in the institution before alluded to. Their weight was one hundred and twenty-four grains.

A cubic inch of gold is worth (at £3 17s. 10 $\frac{1}{2}$ d. or \$18 69 per ounce) one hundred and forty-six dollars; a cubic foot, two hundred and fifty-two thousand two hundred and eighty-eight dollars; a cubic yard, six millions eight hundred and eleven thousand seven hundred and seventy-six dollars. The quantity of gold now in existence in the world is estimated to be three thousand millions of dollars, which, welded into one mass, could be contained in a cube of eleven feet.

The Russian gold mines extend over one-third of the circumference of the globe, upon the parallel of 55° of north latitude. Those of North America extend from 34° to 42° of north latitude, upon the Pacific coast. Those of Australia extend from 34° to 37° of south latitude. The Russian mines were discovered in 1809, the Californian in April, 1848, and the Australian in February, 1851. The finest gold is obtained at Ballarat, and the largest nugget in the world weighs twenty-two hundred and seventeen ounces, and is valued at forty-one thousand dollars. In shape, it resembles a continent with a peninsula attached by a narrow isthmus.

The annual product of gold at various periods has been estimated as follows.

A. D.	14.....	\$500,000
	500.....	200,000
	1000.....	80,000
	1492.....	100,000
	1600.....	2,500,000
	1700.....	6,000,000
	1800.....	15,000,000
	1843.....	31,000,000
	1848.....	46,000,000
	1851.....	139,000,000
	1858.....	250,000,000

The amount of gold in existence at various periods is estimated to be as follows:—

A. D.	14.....	\$427,000,000
	500.....	100,000,000
	1000.....	49,000,000
	1492.....	57,000,000
	1600.....	200,000,000
	1700.....	400,000,000
	1800.....	1,100,000,000
	1843.....	1,750,000,000
	1848.....	1,824,000,000
	1851.....	2,200,000,000
	1858.....	3,000,000,000

Of the latter amount, twenty-five hundred millions is estimated to be in gold coin and bullion, and the remainder in watches, jewelry, plate, etc., etc. The product of the Californian mines since their discovery has amounted to seven hundred and forty-one millions of dollars, and of the Australian to six hundred and forty-three millions.*

* This seems to be a vague estimate of total production. The actual exports from both Australia and

Since 1792, the gold coinage of the United States mint has amounted to five hundred and fifty millions of dollars, of which four hundred and sixty-four millions have been issued since 1850. The gold coinage of the French mint, since 1720, has amounted to sixty-one hundred and forty-three millions of francs, of which thirty-one hundred and thirty-two millions have been issued since 1850. The gold coinage of the British mint, since 1603, has amounted to two hundred and fifty-one millions of pounds sterling, of which sixty-one millions have been issued since 1850. The gold coinage of the Russian mint, since 1664, has amounted to four hundred and fifty-three millions of rubles, of which one hundred and eighty millions have been issued since 1850. By experiments made at the United States mint, it has been ascertained that the wear and tear of half-eagles is a tenth of one per cent per annum. Eagles exhibit less, whilst quarter-eagles and dollar pieces exhibit more.

Gold coins were first issued in England in A. D. 1257, in the shape of a penny. Florins were next coined in 1334, of the value of six shillings. The guinea was first issued in 1663, of Guinea gold. In 1733, all the gold coins, angles, testoons, units, jacobuses, carluses, etc., etc., were called in and forbidden to circulate. The present sovereign was first issued in 1817.

The following will exhibit the contents, in pure gold, of the gold coins of different countries of the world:—

	grains.
Sovereign, England.....	112
New doubloon, of Spain.....	115
Half-eagle, of United States.....	116
Gold Lion, of Netherlands.....	117
Double ounce, of Sicily.....	117
Ducat of Austria.....	118
Twenty-franc piece, of France.....	90
Half-imperial, of Russia.....	91
Moldore, of Brazil.....	152
Mohur, of India.....	188

A commissioner has been dispatched by the United States government to England, France and other countries of Europe, to confer with these respective governments upon the expediency of adopting a uniform system coinage throughout the world, so that the coins of one country may circulate in any other, without the expense of recoinage; a consummation most devoutly to be wished.

The fact that the large amount of gold which has been thrown into the monetary circulation of the world, within the last decade, has exercised so little influence upon the money market or prices generally, is at variance with the predictions of financial writers upon both sides of the Atlantic. The increase in the present production of gold, compared with former periods, is enormous; and it would not be surprising, if, in view of the explorations which are going on in Africa, South America, and countries bordering upon the equator, within the next decade, the product should be a million of dollars daily. The price of gold has not diminished, although the supply has increased seven-fold within fifteen years.—*Hunt's Merchants' Magazine.*

California since the discoveries were to the close of 1857—from California, \$453,655,280, and from Australia, \$320,093,742, or together, \$773,749,022; adding \$100,000,000 for 1858, gives \$873,749,022 less than the estimate of production in those two countries. It is, of course, entirely erroneous.—*Ed. M. M.*

The receipts of the Illinois Central Railroad Company for November were \$221,199 48, of which \$56,000 was applied to the cancellation of bonds.

MONETARY AND COMMERCIAL.

During the past week we have to note an increased demand for money; the receipts of currency, however, from the Indiana and Ohio Banks within the last day or two have been large, and with the previous additions have given a somewhat easier tone to the market. The offerings of paper continue large, and rates are firmly maintained at ten to twelve per cent. for good names with the discount houses, and twelve to eighteen out side.

In Eastern Exchange the market has been close, dealers in some cases finding it difficult to meet the demand; no advance however has been made in prices, the offerings after New Year being expected to be more liberal.

Exchange on New Orleans has been more active and sales close at one per cent. premium. Gold is scarce; the country bankers have taken all that was to be had at $\frac{1}{4}$ prem.

The market for hogs and provisions have been made depressed during the past week.

The *Courier and Enquirer* of December 28, says:

"The week opens with more activity at the Stock Board, and a stronger disposition for investment and speculation. The enlarged amount of floating capital at this point must soon, in part, find new channels of investment at the enhanced value now current. State Loans are firmly held. To-day there were cash sales of Missouri Bonds at 88 $\frac{1}{2}$ @90, with large sales on thirty and sixty days. Virginia Sixes approach par. Holders ask 99 $\frac{1}{2}$ @100. California Sevens are held at 92 $\frac{1}{2}$ @93. At the Second Board to-day there was renewed spirit and buyers were willing to pay $\frac{1}{4}$ to $\frac{1}{2}$ on the closing prices of Friday; compared with which there was an advance in Virginia Sixes 3 per cent., Missouri $\frac{1}{2}$, New York Central Shares $\frac{1}{4}$, Erie $\frac{1}{2}$, Reading $\frac{1}{4}$, Panama $\frac{1}{2}$, Illinois Central $\frac{1}{4}$, Galena and Chicago 3-8, Delaware and Hudson Shares 2, Illinois Central Bonds $1\frac{1}{4}$, Pennsylvania Coal Company 1 $\frac{1}{2}$, Pacific Steamship Company $\frac{1}{4}$.

"The receipts at the Custom House to-day were \$109,723 23. The receipts at the Office of the Assistant Treasurer amounted to \$110,399 14, of which \$95,000 00 were from Customs; the payments were \$432,430 83, leaving a balance on hand of \$5,686,466 82.

"The funds for the payment of the interest due January 1st on the Eighth per cent. Bonds of Minnesota, are now on deposit with the Atlantic Bank. Provision is also made for the interest due on Virginia and Missouri Bonds. The Ohio State interest is with the American Exchange Bank. State Treasurer Stone, placed it here at $\frac{1}{4}$ of one per cent. premium. The Fund Commissioners will remain in New York till January 15th, when the balance not called for will be transferred to Columbus."

The following is a comparative statement of the condition of the New York Banks for the weeks ending December 18 and 25:

	Dec. 18.	Dec. 25.	
Loans.....	\$127,955,110	\$196,716,365	Dec. 338,365
Specie.....	26,608,777	26,374,272	Dec. 230,005
Circulation..	7,710,627	7,704,342	Inc. 6,279
Un'n depts.	89,890,633	88,679,095	Dec. 1,010,936

A *Bullion Bank*.—The Currency Reform Association of New York has lately had under consideration various suggestions and plans for the modification of the banking and currency system. The *Bankers' Magazine*, of New York, has become the channel for the publication of the papers read before this Association. It is understood that the following gentlemen have read papers before the Association, viz: Hon. John A. Dix, (ex. U. S. Senator;) Hon. John Cochrane, (M. C. from New York city;) Hon. George Opydyke, (delegate from New York to the Assembly;) Messrs. James Gallatin, Wilson G. Hunt, and others. The *Bankers' Magazine* for December contains the papers read by Opydyke, also the plan of the Bullion Bank, and the "Report on Currency," by Opydyke, Gallatin, Hunt and Eadie.

The following is a list of the articles in the number for December:

ART. I.—Papers read before the Currency Reform Association, New York. No. 1. By Hon. G. Opydyke. II.—Production and Stocks of Gold and Silver throughout the World. III.—Dissolution of the East India Co., September, 1858. IV.—The State Bank of Iowa—its Plan and Principles. V.—Statistics of Manufactures and Commerce of Philadelphia. VI.—A Bullion Bank—its Prospects and Advantages. VII.—The Laws of Mortality. VIII.—The

Western Bank of Scotland—Liabilities of Shareholders. IX.—Legal Miscellany—Collection Paper—Fraudulent Transfer. X.—The Law of Life Insurance—Effect of Failure to pay Premium Note. XI.—Alleghany County Bonds—Decision of the Supreme Court of Pa. XII.—Liabilities and Resources of the Banks of the City of New York, 1851—1858. Australian Product of Gold; year 1858. XIV.—Report on the Currency Question. By Hon. G. Opydyke, J. Gallatin, Wilson G. Hunt, and John Eadie. XV.—Miscellaneous—1. Will of a Banker. 2. New Counterfeits. 3. Bank Robbery. 4. Texas Railroad. 5. Bank Deposits. 6. Bogus Coin. 7. Treasury Regulations. 8. Iowa Debt. 9. Montreal Debt. 10. St. Louis Debt. 11. Russian Railroad. 12. Louisville Bonds. XVI.—Bank Items—New Banks; New Private Banking Firms in the several States; Deaths of Bank Officers. XVII.—Notes on the Money Market and Stock Market of New York for the month of November.

In view of the recent revulsion in financial affairs, the suggestions of the Committee of the Reform Association will no doubt receive the earnest consideration of Legislators and Financiers throughout the United States. The character of the gentlemen who sign this Report is such as to secure careful reading. But whether sound in whole, or in part only, it should be spread widely before the community here and elsewhere. We subjoin a statement of the measures of reform recommended by the Committee in their own language:

First.—That the Banking Laws of this State be so amended that no bank shall hereafter be permitted to extend its loans, discounts, and other investments, beyond an amount equal to the sum of its capital, half its capital, and the specie in its vaults; nor shall it be permitted to let its specie at any time fall below 20 per cent. of its immediate liabilities, exclusive of its circulating notes. The banks hereafter to be organized under the Banking Laws of this State also to be required, before commencing business, to have their entire capital paid up in full in specie; and that all banks be hereafter prohibited from making loans, either directly or indirectly, on their own stock.

Second.—That all laws against usury be repealed.

Third.—That the circulation of all bank notes of a less denomination than \$10 be suppressed, by means of a tax or stamp duty to be levied by Congress.

Fourth.—That the Government of the United States, throughout its different Treasuries, receive gold from the people, and issue receipts or certificates of deposit therefor, in sums of not less than \$100.

STREET RAILROADS

CITY HORSE CAR RAILROADS.—Perhaps there is not among our improvements one that contributes more to the convenience of the people of large cities than those iron roads on which cars, propelled by horse power, carry passengers from the centre to the circumference of a city and beyond it at a trifling cost. Horse railroad cars have been in use for some years past in New York, Brooklyn and Boston, and have contributed greatly to the convenience of travel in those cities and their vicinity. They have become very popular, deservedly so; and as a stock investment, have paid large dividends—some of those in New York a dividend of from three to five per cent a quarter.

Two years ago, a few capitalists, wishing to establish one of these roads through Philadelphia to the suburb of Frankfort, a distance of five miles from the centre of the city, applied to the Legislature for a charter, designating the streets (five to six streets) through which they designed to run. But the moment property holders on those streets learned that such was the design of the applicants, they raised a great clamor against such roads as a nuisance, operating materially to diminish the value of real estate on the streets designated. Thus feeling, they vehemently opposed the granting of the charter.

The applicants resisted this outcry, and contended that Horse car Railroads would increase rather than diminish the value of such property, both in and out of the city. The charter was granted; and one year ago last winter, the roads were completed through two streets to Frankfort, and the cars placed on them, transporting passengers five miles for 10 cents. The opposition property holders soon discovered the mistake they made in supposing that these roads, passing through the streets, would diminish the value of their property; and now those same men are among the warmest friends of these roads, being willing to see them in almost every street of Philadelphia. So popular have they become, that, as represented, the

residents on nearly every street are desirous that these cars should pass by their doors.

The change in public opinion is very great. This is shown in the fact that no less than sixty miles of railroad were laid through the streets of Philadelphia in a single year, from the 1st of September, 1857, to 1st of September, 1858. Not less than a hundred more miles of this class of railroads are now in process of completion.

It is estimated that before two years have passed more than 300 miles of railroad will be constructed and in operation in Philadelphia.

The effect of these roads on the value of property in the suburbs, where they terminate, has been to augment the price of it more than fifty per cent. Whole rows of houses are being built along these outside lines to accommodate the middling classes, at cheaper rents than can be afforded in the heart of the city. Persons, living at the extreme end of these lines of railroad, can reach their business locations in the city in from 10 to 30 minutes at a cost of from 5 to 10 cents.

These railroads are laid to the centre of the streets (single tracks,) the streets in Philadelphia averaging but about 33 feet wide, and the cars run up one street and down another.

It is astonishing with what rapidity these tracks are laid. The contractors will complete a square of 400 feet in length, in 48 hours, making it ready for the cars. The cars will hold, sitting and standing, from 60 to 65 passengers, and will, at a pinch, hold 74.

The revenue on one of the lines (about three miles long) averages \$20 to each car per day, and the dividends on this line are 4 to 5 per cent a quarter, with a surplus held back to increase the rolling stock. We are informed of single trips of one of these cars yielding \$7 50; the number of passengers carried on this trip (getting in and out and their places being filled by others,) being 150 at 5 cents each. On some of the lines the receipts are \$400 a day.

The tracks are laid flush with the streets, and do not interfere a particle with the carriage way—on the contrary, may be seen whole lines of vehicles, running in the railroad track the moment the car has passed—the width of the track corresponding exactly with the width of carriage and buggy wheels. This mode of travel is the safest for its speed in the world; for, when the brakes are put down, it is impossible for the horses to run off, and the cars can not be moved off the track. They are entirely safe in getting in or out, as they are constructed with but one or two steps from the ground; and when passengers get in or out the car comes to a dead halt.

The cars on the Philadelphia lines pass a given point every three minutes, so that there is little or no detention in using the cross tickets. Some lines have as many as thirty cars and two hundred horses. They run till 12 o'clock at night, and are on the track soon after daylight.

The cars are drawn up quite steep grades with ease, and the wear on horse flesh, as compared with omnibus horses, is a saving—say the proprietors—of 80 per cent. The cars run without any jarring motion, and it is a pleasure to ride in them. In summer time, misses and young children are among their most numerous patrons, going for "a ride," as they say.

We presume that the proved excellence of these roads and the general perception of their advantages will cause them soon to be built in St. Louis. From what we can learn, the city will enjoy the benefit of one or more of these roads before the end of next year.—*St. Louis Republican*.

The Asia brings two days' later dates confirming the reduction in the rate of interest by the Bank of England.

SOUTHERN PACIFIC RAILROAD.

The New Orleans papers of the 21st and 22d, contain the proceedings of the Southern Pacific Railroad convention, but the telegraph has already furnished the leading points of interest. The following, however, touches upon a matter of some importance. Mr. Chilton, from a committee appointed to determine what is bona fide stock, submitted the following:—

Resolved, That each stockholder now present be required to state to this convention whether he has paid in full for all stock held by him, and whether those whom he represents have paid for the shares held by them, and if so, whether in money or services, and if in services, what the nature of those services were.

Mr. Chilton pressed the passage of his resolution as likely to purge the convention, and show what the nature of the claims to stock in this company are.

Col. Post, of New York, Rev. Mr. Henderson and Mr. Johnson, of Kentucky, opposed the passage of the resolution, as did others, because it resulted in no practical good. Pending the discussion, which was exceedingly personal, the convention adjourned. In the course of the discussion President Fowkes explained the transactions by which he held such an immense stock, amounting to more than 100,000 shares. He said:

Between 1854 and 1856 he had his first dealings with the company. He then held its bonds which he had bought in the market for the sum of \$52,000. He paid his money for the bonds. To relieve the company from embarrassment, he converted the bonds into stock at par, thus he became one of the stockholders and interested in its success. He came in as a new purchaser, with his own money. His second transactions was the conversion of 72,000 acres of land into bonds and mortgages for \$380,000, which were converted into stock. This course was taken to form a credit upon which to buy the iron to lay the first section of the road, and thus save the charter and franchises of the company. He saved the charter. The company then acquired a full title and positive rights in Texas. He converted this bonded estate, which covers his own property, into stock at par. Thus was his stock subscription increased.

His third transaction was the conversion of bonds of the company which he held, in connection with the Hon. E. W. King and others, into stock at par.

His fourth transaction with the company was the purchase of \$300,000 of the company's bonds, at \$150,000, payable in four months. These bonds he also converted into stock at par.

These four transactions made him a stockholder to the extent of \$532,000.

His other stock he bought in the market with his own money, paying cash for it, according to the demand of the holders. At the time when the company was stricken down by the panic of 1857, he entered the market and bought up the stock.

These were his transactions with the company up to the time of the creation of the deed of trust.

The whole Board of Directors of the New York Central Railroad have been re-elected, with the exception of Mr. John D. Wolf, whose place has been supplied by Mr. Charles H. Russell.

VIRGINIA & TENNESSEE LINE--PROPOSED LINE OF FRENCH STEAMERS.

The eleventh annual meeting of the stockholders of the Virginia & Tennessee Railroad Company, was held at Lynchburg on the 15th inst., when the report of the President and Directors was read, giving an account of the operations of the road for the year ending August 31st, 1858. The earnings have been as follows:

From passengers.....	\$161,700
“ freight.....	27,303
“ mails.....	30,180
Running expenses.....	\$46,153
	244,950
Net earnings (47 per cent.).....	\$23,233

Being an increase over last year..... \$109,512

Since the last report of this road, the East Tennessee & Virginia has been completed; also the Norfolk & Petersburg—making a continuous rail from the Chesapeake to the Mississippi. Fifteen miles on the Cleveland Branch of the East Tennessee & Georgia have been put in operation. The Orange & Alexandria is progressing, and on its completion the distance from Washington to Memphis will be 104 miles less. Upon the completion of the Mississippi Central, now actively progressing, the line to New Orleans will be unbroken. Other roads are in progress which will add directly or indirectly to the business of this road.

The report closes with presenting some statements in regard to direct trade between Norfolk and St. Nazaire in France, from which we take the following extract:

A charter has since been obtained, incorporating a company under the title of “The Norfolk & St. Nazaire Steamship Company,” to effect the object of the conditional arrangements entered into by Mr. Preston and the Orleans Railroad Company, of France.

The railroad interests in France are willing to raise at once \$1,500,000, being one-half of the amount necessary to start a line of four steamers, to run between the Chesapeake Bay and St. Nazaire, in France. It only waits a like amount on this side to be immediately started, and thus open at once a direct trade with France, and from thence to other parts of Europe, “for France is already checkered with railroads, and every day others are projected and in process of construction. They are all in communication with the several countries.—The railroads of the North traverse Belgium and reach into Russia; the Strasburg stretch away into Germany; the Lyons road into Italy and Switzerland; and, lastly, the Bordeaux connects France and Spain.”

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He may be consulted by companies upon all questions appertaining to the cost, location or plan of construction of Railroads, Bridges, Canals, Water Works, or the improvement of River Navigation, either at his office or on the site of the work.

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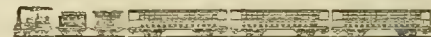
NOTICE is hereby given that Charles W. Grannis, of Gowanda, Erie county, N. Y., is no longer an Agent for Allen & Noyes' Patent Metallic Packing. The power of attorney is revoked, and no acts of his will be recognized by the patentees.

July 14, 1857.

jr23-1m

Winter Arrangement.

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The above Trains arrive in Baltimore at 7:35 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire or Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:30 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

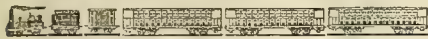
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And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRES-COTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
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Indianapolis to Terre Haute,

CONNECTING at Terre Haute with the EVANSVILLE & CRAWFORDSVILLE, and the TERRE HAUTE & ALTON RAILROADS.

Trains leave Union Station, at Indianapolis, daily, Sundays excepted, as follows:

MAIL TRAIN.

Leaves Indianapolis at 11:40 A. M., (after the arrival of the trains from Cincinnati.) Arrive at Terre Haute at 3:15 P. M. Leaves Terre Haute at 3:40 P. M., by the Evansville & Crawfordsville Railroad, for Vincennes, Evansville, Cairo, and St. Louis. Or by the Terre Haute & Alton Railroad, at 3:40 P. M., for St. Louis, Mo.; Cairo, Decatur, Springfield, Jacksonville, Naples, La Salle, Illinois; and Burlington, Iowa.

EXPRESS TRAIN.

Leaves Indianapolis at 8:45 P. M. Arrives at Terre Haute at 11:52 P. M.; making connections with the 12:30 A. M. trains of the Evansville & Crawfordsville and the Terre Haute & Alton Railroads, for the West and South, as above.

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9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

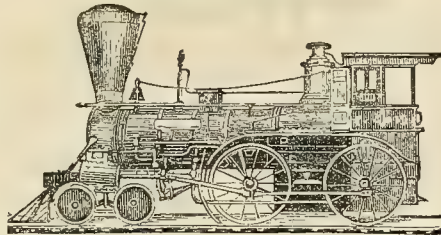
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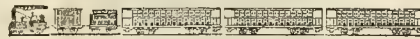


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One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:30 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

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Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express.

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities. Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off.—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cressline for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:00 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

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generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

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WALTER McQUEEN Sup't. Aug 15
N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam.
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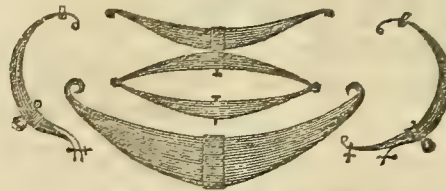
THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

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Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

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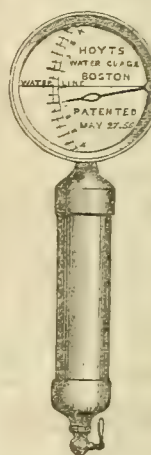
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This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

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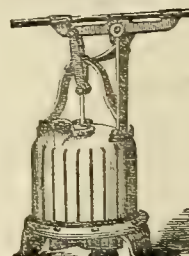
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Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect— are simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Horse Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, DEC. 23, 1858.

Railroad Record

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A nice little quarrel is on the tapis between the Michigan Central Railroad and the Great Western. The Detroit and Milwaukee Road, which is controlled by the former, propose running a line of boats from Grand Haven to Milwaukee, which is the only possible way we can conceive of their reaching the latter place. The distance from Detroit to Milwaukee by this route will be less than from Detroit to Chicago by the Michigan Central, and nearly one hundred miles less than the two points by the way of Chicago. Notwithstanding this difference, the Michigan Central Road demands that rates to Milwaukee shall be the same by both routes, and unless this is agreed to they will run a line of boats from Buffalo to Detroit, in opposition to the Great Western. The latter will not agree to such rates, and say they will not only run from Grand Haven to Milwaukee, but also to Chicago, and their rates will necessarily be lower than by the longer route.

No. 46.—VOL. 7.

RAILROADS OF THE WEST AT THE CLOSE OF 1858.

We have been in the habit of making a Railroad Review at the close of each year; but they have now become so numerous and complicated, that it is difficult to make such a review accurately, and for such a work as ours, hardly necessary. For guides and directories of Roads, this should be done. It is a valuable thing for the traveling public; but not necessary to our purpose. We shall, however, give a brief review of the Roads in the Northwest, and in the valley of the Ohio.

1. OF OHIO.

In the last two years, very little has been done in railroads, in Ohio,—except to finish some that had been begun, and make some necessary improvements. The following were the running roads of Ohio, on the first of January, 1859:

	Miles.
Little Miami, Columbus & Xenia (run jointly)	139
Cleveland, Columbus & Cincinnati	135
Cleveland & Toledo	187½
Mansfield & Sandusky	125
Springfield & Columbus	20
Cincinnati, Hamilton & Dayton	60
Cincinnati, Painesville & Ashtabula, (a)	95½
Cleveland, Zanesville & Cincinnati	61
Iron	13
Pittsburg & Steubenville	125
Bellefontain & Indianapolis	118
Xenia & Belpre, (b)	16
Springfield, Mount Vernon & Pittsburg, (c)	50
Piqua, Columbus & Indianapolis, (d)	72
Greenville & Miami	47
Scioto & Hocking Valley, (e)	56
Toledo & Wabash, (f)	73
Dayton & Western	38
Ohio & Mississippi	30
Cincinnati & Indianapolis, (g)	20
Cincinnati, Wilmington & Zanesville	131
Cincinnati & Marietta, (h)	184
Cleveland & Pittsburg	191
Cleveland & Mahoning, (i)	67
Easton & Hamilton	43
Carroll County	11½
Central Ohio	138
Dayton & Michigan	72
Pittsburg, Fort Wayne & Chicago	250
Sandusky, Dayton & Cincinnati	169
Michigan Southern & Northern Indiana	101
31 Roads,	2,841

(a.) About 23 miles of the *Painesville & Ashtabula* Road is in Pennsylvania, which being deducted from the amount above stated, leaves 2,818 miles, as the amount now in Ohio.

(b.) The *Xenia & Belpre* Road is now finished only from Dayton to Xenia; but it is intended to run southeasterly to make a connection with the *Marietta* Road, at or near Greenfield; thus becoming a through route, and a coal road.

(c.) The *Springfield, Mt. Vernon & Pittsburg* Road was intended to connect with the *Pittsburg, Fort Wayne & Chicago*, at *Lakeville*,—making 114 miles,—and a through line from *Pittsburg* to *Cincinnati*.

(d.) The *Piqua, Columbus & Indianapolis* Road was intended to be finished to *Union*, or to *Indiana Line*, some 26 miles farther,—and thus making a through line from *Columbus* to *Indianapolis*. So short a distance to produce so important a result, was a thing which no business man could overlook, and accordingly the boardholders have most commendably undertaken to finish it to *Union*. Some eight miles are done, and it is supposed the whole will be finished at an early day.

(e.) The *Scioto & Hocking Valley* road was intended to connect with the *Mansfield & Sandusky* Road, at *Newark*. Whether it ever will be finished, is uncertain.

(f.) The *Toledo & Wabash* Railway is mostly in *Indiana*. The entire road is 383 miles in length.

(g.) The *Cincinnati & Indianapolis* Road is only 20 miles in *Ohio*. It has a separate track from the *Ohio & Mississippi*.

(h.) The *Cincinnati & Marietta* Road was intended to go to *Wheeling*, and connect with the *Pennsylvania* Road. The completion of this part of the plan, is very doubtful.

(j.) The *Cleveland & Mahoning* Road is unfinished; being intended only to connect with *Pennsylvania* Road.

To complete the Roads above mentioned, with the *Dayton & Michigan*, and two or three small branches, will require about 400 miles of new road. Within three or four years, it is probable, these will be completed, and it is not probable that any entirely new Road will be undertaken. *Ohio* is likely, therefore, to finish her system of Railroad with about 3,200 miles of completed Road.

2. OF INDIANA.

	Miles.
Cincinnati, Peru & Chicago	30
Cincinnati & Chicago	108
Evansville & Crawfordsville	109
Indianapolis & Pittsburg	84
Indianapolis & Cincinnati	90
Indiana Central	73
Jeffersonville	108
La Fayette & Indianapolis	64
Madison & Indianapolis	87
Michigan Southern & Northern Indiana	195
New Albany & Salem	288
Ohio & Mississippi	171
Pittsburg & Fort Wayne	133
Peru & Indianapolis	73
Toledo & Wabash	163
Terre-haute & Richmond	73
16 Roads,	1,849

3. OF ILLINOIS.

	Miles.
Bellefonte & Illinoistown	15
Chicago, Alton & St. Louis	218
Chicago, Burlington & Quincy	310
Chicago, St. Paul & Fond du Lac	70
Chicago & Milwaukee	45
Chicago & Rock Island	182
Fox River Valley	84
Galeana & Chicago	250
Illinois Central	704
Rock Island & Peoria	11
Toledo & Wabash	14
Peoria & Bureau Valley	47
Peoria, Oquauka & Burlington	94
Michigan Southern	12
Great Western	170
Michigan Central	15
Joliet Branch	30
Ohio & Mississippi	148
Peoria & Oquauka Ext.	49
20 Roads,	2,477

4. OF WISCONSIN.

	Miles.
Chicago, St. Paul & Fond du Lac	21
Chicago & Milwaukee	40
Kennebec & Brockford	52
La Crosse & Milwaukee	138
Milwaukee & Hericon	42
Milwaukee & Mississippi	192
Mineral Point	32
Milwaukee, Watertown & Burlington	50
Racine & Mississippi	69
9 Roads,	636

5. OF MICHIGAN.

	Miles.
Michigan Central	269
Michigan Southern	238
Detroit & Milwaukee	141
Detroit & Toledo	70
4 Roads,	718

6. OF IOWA.

	<i>Miles.</i>
Iowa & Nebraska.....	36
Dubuque & Pacific.....	50
Keokuk & Muscatine.....	87
Keokuk & Fort Des Moines.....	38
Burlington & Missouri River.....	35
5 Roads.....	247

These six States comprehend the Northwest, and the general aggregate stands thus:

	<i>Roads.</i>	<i>Miles.</i>
Ohio.....	31	2,641
Indiana.....	16	1,449
Illinois.....	20	2,477
Wisconsin.....	9	636
Michigan.....	4	718
Iowa.....	5	247
6 States.....	85	8,768

The six Northwestern States have ONE-THIRD of all the railroad connections actually made in the United States. It is proper to say, that we have confined the *miles* given in each State, by the State lines.

We shall now add the two States of Missouri and Kentucky, as both these constituting the same region:

7. OF KENTUCKY.

	<i>Miles.</i>
Kentucky Central.....	108
Louisville, Frankfort, & Lexington.....	94
Louisville & Nashville.....	67
3 Roads.....	269

8. OF MISSOURI.

	<i>Miles.</i>
Hannibal & St. Louis.....	67
North Missouri.....	108
Pacific.....	125
Iron Mountain.....	87
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Thus we have 9,424 miles of Railroad finished in nine States, comprehending over 400,000 square miles. In one of these States (Ohio), the proportion is one to 14 square miles; In another (Indiana), one in 23. In a third (Illinois), one in 24. In a fourth (Michigan), one in 100. In a fifth (Wisconsin), one in 85. In Iowa, one in 240; in Kentucky, one in 170; and in Missouri, one in 155. We may safely assume, that in a few years, this region will have a proportion as large as one in twenty-five square miles; in which case the Central Railroad system will contain 16,000 squares,—and, we add *with confidence*, the profitable part of the AMERICAN RAILROADS.

DAYTON AND GREENVILLE RAILROAD.—The following gentlemen were elected Directors of the Dayton and Greenville Railroad, Monday:

Peter Odlin, Thomas Parrott, H. C. Stimson, David Studybaker, John Wharry, Adam Speice, Wm. L. Darrow, John H. Achey, Herman Gebhart, James McDaniel, E. F. Drake, F. De Peyster, of New York, James Thomson, New York.

The Board was organized by the appointment of H. C. Stimson, President and Superintendent; Herman Gebhart, Vice President and Treasurer, and John L. Miller, Secretary.

HOW TO CULTIVATE BEES, AND RAISE HONEY.

Raising bees and making honey is a profitable, as well as pleasant thing to many people. We find in the letter of Mr. Kelly, published in the *Ohio Valley Farmer*, (a most excellent work,) an account of bee raising, which may interest some of our readers.

I have 57 families of bees. I find it to be profitable to raise bees for honey. I have been engaged in bees for twenty-five years. I find that all the patent bee hives that I have tried have failed—all humbug. I have tried many, and they have all failed to be what they were represented to be. The bee miller will go where the bee can go, and if the bees are not strong enough to protect all the comb, the miller will destroy them, or deposit their eggs in the comb, and hatch and destroy the whole hive. This is often done when bees swarm too often, regardless of the quantity of honey they may have. If the bees are strong they keep out the worms themselves.

All the patent work that I have tried has only proved a harbor for the worms, and at the same time been very expensive. All bee hives should be so arranged that the bees could have the advantage of driving the miller or worm out, by an inclined plane. I have tried an experiment with nineteen families in one building, separated of course from each other. Being somewhat acquainted with their nature, I manage the cells so that they make the fine honey in boxes or drawers, that hold 16 lbs.; the building is 12 ft. square, cost about \$200. I can take 70 or perhaps 80 boxes or drawers per year—say 70, at 16 lbs. per box; 1,122 lbs., sold at 25 cts. per lb., \$280, without destroying the bees. I have one family that I have robbed every year for fourteen years, and had its increase. I find to take their honey every year is an advantage to the bees, as well as to the owner, if properly managed.

VALUE OF EXCHANGE.

MADISONVILLE, KY., Dec. 20, 1858.

DEAR SIR:—I have some times seen it stated in your and other journals, by railroad men, that in making purchases in England of iron, etc., a great saving was effected if the sellers agreed to take their pay in New York, to the amount of the exchange between England and America, which is generally nine per cent. Now I take this to be a mistake, and I will endeavor, as clearly as I can, to give my reasons and my view of the subject. Many years ago the value of one pound sterling was fixed at \$4 44, which at that time was really its true value. Since when the relative value of the coins of England and America have changed, that of England remaining the same, while the American coin has been, I believe, twice depreciated. The nominal value of both remaining unchanged, it is, therefore, necessary to add a per centage to the American coin equivalent to the exact amount of depreciation.

For instance: If I have to pay one pound sterling in New York, what have I to pay? Why, either the one pound sterling itself, in

the shape of an English sovereign, or its equivalent, which is \$4 44, and the exchange added.

I have both bought and sold English gold in New York city. I have generally paid \$4 87 for each pound sterling and sold at \$4 85; the difference, two cents or less than one-half per cent., being the broker's profit. The American five dollar gold piece is worth in England one pound and seven pence half penny—the English penny being about two cents. I have received sterling drafts on Cincinnati, for which I was paid for each one pound—\$4 84. I have purchased sterling drafts at the same rates. The fluctuation of the exchange is generally from eight to ten per cent., neither of which is often reached, nine per cent. being about the usual thing. The difference between the two or two per cent. being the real variation in exchange, so that if you make your contracts when the exchange is ten per cent. and pay when it happens to be eight, you make two per cent. by exchange. If iron be purchased in England at ten pounds sterling per ton, payable in New York, the amount to be paid in New York will be ten times \$4 44, and the exchange added whatever it may happen to be at the time of payment. For, supposing the purchaser agrees to pay £10 per ton in New York, he must procure the ten pounds sterling before he can pay it, and what will that ten pounds cost him? Why, precisely its market value in New York city at the time he made it, and that is \$4 44, and exchange added per pound sterling.

Should the contract read that the purchaser shall pay ten pounds sterling per ton in New York for iron, or \$44 40 per ton, it would then be quite a different matter, as in that case there would be two modes of payment distinctly specified, either of which would fulfill the purchasers contract, and, of course, having a choice, he would pay the lesser.

My experience is simply this, that a pound sterling in gold or in bills of exchange on England, can not be purchased in New York or elsewhere for \$4 44, but can be purchased only, for that amount, and the exchange added. Likewise in selling I would not receive \$4 44 per pound sterling for a bill of exchange, but I have received \$4 84 per pound.

C. S.

☞ The Cincinnati Street Railroad Company, has opened an office in Selves' building, on 3d street, and the books are now open for subscription to the capital stock.

Some of the more shrewd among the property holders on Front street are alive to the fact that street railroads really improve the value of real estate on thoroughfares like that, and are expressing a readiness to accept what Congress street is disposed to reject. Twenty-three property holders on Front street have signed a petition, just put in circulation, for the location of a street railroad on that highway.—*Commercial*.

THE GRAPE AND FRUITS IN THE S. W. ALLEGHENIES.

BY DAVID CHRISTY.

The views presented in the preceding articles were the result of personal investigation, and intended to call attention to the South-western Alleghenies as the most promising field for vine cultivation eastward of the Rocky Mountains. The theory submitted for consideration, that *altitude* has much to do with successful grape culture, received a strong confirmation in the last letter of Mr. GUERIN. The letters which follow, not only show that *mildew* and *rot* do not affect the grape at the higher elevations, but that a belt surrounds the mountains in which Spring and Autumn frosts do not injure either the vintage or the fruit crops. These letters embrace facts not generally known, as well as some new discoveries, which, when amply tested, may be of the utmost importance to North Carolina. The writers live more than fifty miles distant from each other, and the statements made prove that uniform laws prevail throughout the mountains.

The Hon. T. L. CLINGMAN had informed me, that localities existed south of Ashville, in which frosts never affected the fruit crops. The letter of Mr. M'DOWELL shows, that a similar state of atmosphere exists in the mountains around Franklin; and the inference is, that the same results may be expected every where.

Mr. Murdock's letter was written at the request of Hon. T. L. CLINGMAN, and is very satisfactory. Mr. M'Dowell is a close observer, and has long been a reader of the scientific literature of the country. He is known to the Botanical world as the discoverer of a new *Rhododendron*, which takes his name as a new species.

The altitude at which the *thermal stratum* of air prevails, will, of course, differ in different localities; and time, and patient investigation, will be necessary to arrive at satisfactory conclusions. The fact that the foreign grape has borne fruit for twenty years in succession upon the mountains, amply confirms the views advocated in these articles; and the additional fact, stated to myself by Col. MOORE, of Franklin, that when his grapes, in his garden, escape the Spring frosts, the mildew and rot frequently destroy them, proves, also, that the valleys can not be relied upon for grape culture.

ASHVILLE, Oct. 4, 1858.

DAVID CHRISTY, Esq.

Dear Sir:—Your letter of the 25th ult., to Mr. Clingman, he has handed me with the pamphlet, and requested me to answer it, as he is at present very busily employed, and he thought I could probably do it more satisfactorily.

I have read your publication with much pleasure, and in many things quite agree with you so far, particularly, as fruit is concerned. I have been thirteen years in this neighborhood, and in Pennsylvania two, and during that time always found peaches on the mountains when there were none in the valleys. I believe that at three hundred feet above the valleys, apples and peaches rarely, if ever, fail in a crop. Grapes, I believe, in the same situations, would be equally likely to be constantly fruitful and free from rot and mildew. There are situations in this district, high up on the mountains, where the European grapes have for twenty years borne twenty successive crops, without mildew or rot; and I know of many around me which they call English grapes that do constantly bear, but on examining, I have never been able to trace out to be English or European grapes, and think the odds are much in favor of them being native. I have, in my researches for natives, found out between twenty and thirty varieties of native grapes, some, I believe of the very best kind, and probably some will prove more valuable than the Catawba, in flavor and aroma. I have sent Mr. Longworth a dozen kinds last year, and if spared to next Spring, I hope to obtain all the other varieties. On the Tryon Mountain, thirty miles south-east of here, in November last year, I found grapes of excellent quality still hanging on the vines and Cayenne Pepper as green as in July, although every thing that frost would touch was destroyed on the low grounds. I feel quite satisfied that at certain altitudes the frost does not injure in late Spring or early Autumn. I think the soils of the mountains generally well suited to grape and fruit culture in general.

Mr. N. WOODFIN, has largely experimented on the mountains suitability for farming and grazing purposes, and finds them successful, far beyond his most sanguine expectations, for both purposes. They do not suffer from drought as the low lands do, and from my knowledge of sheep feeding, which extends over a period of upwards of forty years, I would prefer the mountains, prepared properly, to the low lands, and that can be done at no great expense. Grapes, oats, and clover succeed admirably, particularly the Swedish or Alsac clover, which I have grown for four years with great success.

I remain, respectfully,

Your obedient servant,

WILLIAM MURDOCK.

FRANKLIN, N. C., Oct. 29, 1858.

DAVID CHRISTY, Esq.:

The last time you were at Franklin, we had a conversation in relation to grape culture amongst our mountains. You will recollect that I informed you of some small farms, at the sources of the brooks which run

into our valleys, where the European grape had not failed in twenty years, and that other fruits have never been known to fail from being affected by late frost. Since that time I have devoted much attention to the subject, and searched into the cause, and find it to be to the following effect: In the Spring, when there is a change in the temperature of the atmosphere, from heat to cold, a frost can not take place until the atmosphere becomes tranquil and at rest. The warm earth is at the same time radiating its heat and warming the surrounding atmosphere, so that it becomes light and mounts upward until reaching an atmosphere too thin to support it. The consequence is, that it is arrested in its upward progress. After it has left the earth its vacuum is filled by a cold, damp, heavy current, which rests on the surface of the lowest valleys, where the heaviest frosts ever take place. This cold, damp frost stratum, in our valley, near Franklin, I find to be something over three hundred feet deep, and upon the top of this rests the above named thermal stratum, and their junction is so sudden that the lower half of a shrub will have its leaves and flowers completely blackened by frost, while its top is unharmed and retains its most vivid verdure. The frosts of the 27th and 28th of last April, killed all kinds of fruit in our low valleys, while the few orchards which were near the sources of our brooks, on the sides of the mountains, were loaded with fruit—the cause being, an ascending grade up these brooks had brought them above the first line, and within the balmy influence of the thermal stratum.

I have this Summer taken the depth of the thermal stratum, and find it near four hundred feet vertical height; and beyond that, the atmosphere becomes so cold, though too dry to produce frost, that it freezes out the young fruit growing.

Of nights, when there was frost, I have ascended up into the thermal stratum, and on reaching the line, sensibly felt the warm air meet my cheeks. I will here venture the prediction, that at any point below the level of this warm dry stratum, the European grape will not succeed in the Southern Alleghenies, and that above it they will, until you have passed beyond it on ascending grade. I will tell you why I say so. Within the frost stratum, that is to say, from the common level of our valley, three hundred feet upward, I tried to cultivate the grape for ten years, and failed from the very causes so generally known to all others who have made the attempt; while the small farmer, whose poverty had forced to make his farm away up on the sides of the mountains, having a few vines of the Black Hamburg grape, they have never failed to be loaded with fruit, of perfect cluster and luscious taste, for the space of twenty years. This week I see a letter

from Mr. Guerin to yourself in a number of the *Cincinnatus*. That section of it that reads thus: "Ascending beyond this, one hundred and sixty feet, etc." Now, how exactly does this remark coincide with my own observations? Does Mr. Guerin really know that he never can succeed with his grapes, until he places them all where they will be bathed, as it were, in this dry, warm, and balmy region? These are facts which must be known and acted on, before success will crown an effort to make the Southern Alleghenies a wine producing country. The observations which I have made of the wonderful production of the few vines cultivated by those farmers on the mountains sides, the rich quality of the fruit, and their unfailing yield for more than twenty consecutive years, renders me confident that no country will surpass it in grape husbandry, where the vines are cultivated within the thermal zone above indicated.

Respectfully, etc.,

S. McDOWELL.

THE PACIFIC RAILROAD AGAIN.

Compromises are charming devices, the design of which usually is to conciliate two opposite interests by destroying the value of each. Nothing more delights your average statesman than to achieve such a triumph; and compromise-making has accordingly made the political fortune of several illustrious men in modern times and in various countries. It is not surprising, therefore, we suppose, that Mr. Seward, who has never been thought to look with much favor upon this branch of intellectual industry, should at last have been tempted into trying his powerful hand upon it. He has certainly produced a capital specimen of the manufacture.

Mr. Seward, on Tuesday morning, made one of his masterly and argumentative speeches in the Senate, on behalf of the Pacific Railroad. In the course of this speech he set forth most effectively and truly the importance of the road to the interests and the institutions of the country, and declared it to be the duty of the Government to take the burden of the work at once upon its own shoulders. Now, nothing can be more clear in the theory of our political system than this—that the Government of the United States is never to undertake any great work of internal improvement which can be successfully carried out by individual effort. Mr. Seward himself is strongly opposed, we believe, as any man can be, to all unnecessary extensions of Government influence and Presidential patronage. Certainly, then, we have a right to infer from Mr. Seward's advocacy of Government action in this matter, that he believes it to be impossible, or at least highly improbable, that any private company or companies should be found or formed upon which the duty of constructing the road can be safely imposed. Either the road can be built without the aid of the Government or it can not be. If it can be so built, then the project of raising an immense national loan for the purpose of constructing it, and of confiding that loan to a new bureau at Washington, which is to be created for the special purpose of expending this vast sum of money, and managing this colossal enterprise, should be

forthwith scouted out of Congress as something worse than an absurdity. Mr. Seward, however, does not think this possible—nor do we. But Mr. Seward, after reciting his reasons for the faith that is in him—and irrefragable reasons they are—goes on to agree that the road shall be built by the parties who can not build it. That is, by the very private companies whose incompetency to the work lies at the root of his argument in favor of Government action! And here we take issue with our distinguished Senator.

His compromise is a very pretty and perfect compromise. Adopt it, and you will never hear any thing more of the Pacific Railroad as a fact in the earth. As a *fancy* in Wall-street, however, we shall all of us hear a great deal more of it than will be either pleasant or profitable, should this notable scheme be erected into a law of the land, and the business which Government alone can do be handed over to the companies who can not do it. The programme of these Pacific Railroad Companies that are to be is not particularly novel. We seem to ourselves to have heard before this time of magnificent lines of railroad, that were to be carried through vast tracts of splendid but unsettled territory, on the basis of Government grants of land—with reserved sections—with hypothecations of small kingdoms—with civilization bubbling up about every mill-stone, and the desert blossoming over every sleeper on the marvelous way. All the superb paraphernalia now paraded in front of the new Pacific Companies have played their part in other pageants not less brilliant—not less beautiful. And what has come of it all? What are the fruits of all this fair promising—where the final resting-place of all this grand procession of engagements, advantages and financial temptation?

In matters economical as in all other matters of a sublunary kind, we fear that an ounce of history will always be found to be worth more than many pounds of prophecy. And when we read the Stock-lists of to-day, and remember as we read what those Stock-lists used to tell us, for instance, of that great Illinois Central Railroad which was to be the one financial triumph of the times, we can not see therein much hope for the new brood of shining projects which the Senate now proposes to let loose upon the land.

It is indeed mere midsummer madness, or something worse, to talk of organizing another crusade upon the pockets of mankind under the guise of building the great national work of a Pacific Road. Rash and thoughtless, and reckless of experience as most men are, the severe lessons of the railroad delusions, which have brought so much misery upon the country during the last few years, have not yet been forgotten. In truth, they have not been fully read to us. There are a few more "railroad clouds" still lowering along the financial horizon, which must break upon us in the immediate future. To imagine that, in the face of these disasters, past, present, and at hand, any thing like a sound and successful organization of private capital for the purpose of building a gigantic railway—which must for years be virtually a burden upon its proprietors—can be accomplished, is utterly idle. The only result that can possibly follow from calling half-a-dozen Pacific Railway Companies into being with the sanction of the Government, will be a momentary gush of speculation, followed at no long interval of time by the undoing of

thousands of innocent and unthinking and ignorant persons.

The whole Railway interest in the United States has much lost ground to recover. It has to learn to take care of itself; to become a *business*, in the practical sense of that word; to find out that economy is worth all the kite-flying in the world; to discover that wood is more extensive than coal; that bad rails really cost more than good ones; that one Manager, who is a manager, a more important person than sixty Directors, who never direct. It has, in short, a character to re-establish—a colossal property to rescue from depreciation and ruin—a new world to conquer.

If the Pacific Railroad is to be built, it will not be at the Stock Exchange that the money for building it will be found. To send it there in search of funds will be not only to demolish the project itself, but to demoralize the country with new materials and opportunities for baseless speculation. If the Government, on the other hand, should undertake the work, it would not only secure the building of the road within a reasonable time, but contribute materially to the restoration of financial confidence throughout the country, by furnishing a new and secure basis for the investment of funds. The very circumstances which make the idea of founding new railway companies on such a scale, and for such a purpose ridiculous, would assure the success of a Government loan judiciously created. There has rarely been an epoch in our history at which the sums necessary for such an enterprise as this could have been secured by the American Government on such terms as it could now command. Nor is this all. What could afford a more striking evidence of the real unity and harmony by which the nation beneath all the conflict of passions, parties and sections is animated, than the co-operation of all the States in a serious expenditure for the achievement of a work invaluable to the whole Union? From whatever point of view we contemplate it, the plan of building the Pacific Railroad by Government action alone, possesses many striking advantages over the projects of private enterprise. But its decisive advantage certainly is this: That it is a *practicable* plan, and the only practicable plan within the compass of the nation. If the road is to be built, this is the way in which to build it. If not, then let us hear no more of the matter.

ILLINOIS SOUTHERN RAILROAD.

It affords us unfeigned pleasure to announce as we can now do with perfect confidence, that this great railroad enterprise to which we have so often called the attention of our readers, has at length assumed a tangibility and vitality that warrant the conclusion that it will be pushed to a speedy completion. The subscriptions just made by the County Court of this county, and by the Borough of Mt. Carmel, nearly complete the amount of means necessary to prepare the road for the superstructure in this county, and also insures the grading of the line from Vincennes, the eastern terminus, to the southern boundary of Saline county, a distance of one hundred miles. The condition and prospects of the upper end of the road may be briefly stated as follows:

1. Wabash county has, in her corporate capacity, through her County Court, authorized the issue of her bonds to the amount of \$100,000; the Board of Trustees of the Borough of Mt. Carmel have placed the \$25,000

voted by the town, at the disposal of the Directors of the road, and arrangements have already been made to render these subscriptions available at once,—and these sums, with the private subscriptions made by our citizens, added, furnish an aggregate of \$150,000,—a sum equal to the estimated cost of grading the road through Wabash county.

2. In White county a large amount of work has already been done, and the means are at hand to continue operations vigorously. A corporate subscription of \$100,000, in county bonds is confidently relied upon, and that subscription in addition to the other stock, will afford ample means to complete the road bed through White county.

3. Saline county presents the largest individual and landed subscription of any county on the line—amounting already to \$80,000,—which added to a County subscription which it is already certain will shortly be made—will be ample means to grade the road through that county. A large force is now at work in that county, clearing the line of the road.

It will thus be seen that if the President and Board of Directors exercise skillful management and persevering energy, one hundred miles of the road can be made ready for the iron within twelve months, and we confidently expect to see the cars running from Vincennes to Carmi by the first of December next.

A new impetus has been given to the enterprise at the southern terminus of the road, by the recent subscription of \$100,000, by the Emporium Real Estate & Manufacturing Company, of Mound City. This, we believe, makes \$250,000 subscribed by responsible parties in Pulaski county, and will insure an immediate commencement of the work at Mound City.

A corps of Engineers under the charge of Mr. John K. Crosswell, an Engineer of great ability and experience, and withal a gentleman of the highest type, are now actively engaged in locating and staking for the work, the line from the southern to the northern boundary of this county.

The Messrs. Stanton & Co., to whom the contract for grading the section of the Road last named, has been let, have advertised for 300 hands, and shanties for the laborers are already being erected, and it is the intention of the Contractors to make a vigorous commencement of the work next week, and to prosecute it with all possible dispatch.

The Messrs. Stanton have been engaged for many years in the construction of public works in the Eastern and Middle States; and their well known energy, enterprise and liberality give assurance of a faithful and expeditious performance of all their undertakings.

The Road as located will run through Mt. Carmel at a very convenient distance from the central and business portion of the town, crossing Main near South street, three blocks from the Court House.

Great credit is due Gen. Butler, the popular president of the Board of Directors, and also to Mr. Jaquess the Mt. Carmel Director, for their untiring efforts in behalf of the section of the Road traversing this county. Gen. Butler has labored incessantly—in season and out of season, from the inception of the enterprise; and it is doubtless a source of great gratification to him, to know that his efforts have been followed by an increasing prosperity, and that in due time those efforts will be crowned with complete success.—*Mt. Carmel Register*, Dec. 24.

THE BLUE RIDGE RAILROAD ENTERPRISE.

We have spoken of the great importance of opening this highway to the West. We have argued that the road can not be built unless by the aid of South Carolina. We have shown that, by granting the aid asked, the State will not assume a heavy burden of taxation of the people. But it is urged that, this granted, after having exhausted the means in their possession, the company will still fail of accomplishing the enterprise, and only occupy a position to return again and again to the State for further, indefinite and interminable aid years to come. Let us probe this matter to the bottom, and satisfy ourselves fully.

The first thing to determine is the total cost of the road completed. This determined, and it being ascertained what portion has been raised (whether already expended or in hand), it would be possible to know precisely how much more will be required, and to consider intelligently where it can be obtained—how much the State must provide, and how she will be able to do it.

The estimated cost of the Blue Ridge Railroad, constructed from Charleston to Knoxville, is \$7,500,000. This is the estimate of the Company's Chief Engineer, Col. Walter Gwynn, of Virginia. It is based upon very careful and detailed tables of the cost and construction of the road made by Col. Gwynn. This gentleman is a graduate of West Point, and was appointed to the United States Corps of Engineers. In that service he was actively engaged on surveys for the great internal improvements of the country. After retiring from this corps, the first in the army, he has been employed on the principal works in the Southern country. With high scientific accomplishments and a large experience, he is now in the maturity of his intellect. The judgment of such a man, based upon facts carefully obtained under his own supervision, and with ample time allowed for correction, is surely worthy of confidence. Nor is it only a matter of conjectural estimate and calculation. In the work performed at an expenditure of two millions of dollars, and embracing the principal difficulties, there is positive and experimental data affording little room for error of judgment or miscalculation in the cost of completing the work. And the reputation and judgment of Col. Gwynn is not alone invoked. His estimate is only confirmatory of that made by Mr. Benjamin H. Latrobe, the distinguished Engineer and Chief of the Baltimore & Ohio Railroad—a gentleman of the highest reputation, and of experience obtained on a road built with the highest grades and some six or eight tunnels through the hardest rock. These distinguished engineers differ little in their calculations from the estimate made by Mr. Geo. B. Lythgoe, who is neither unknown nor unrespected. Such is the basis of character and professional ability on which this estimate rests. It appears sufficient to satisfy the most skeptical who may yet be open to conviction. We will, therefore, regard it as settled that the total cost of the road will not exceed \$7,500,000.

The next subject for inquiry is, how much of this estimated amount has already been raised (whether already expended or still remaining in hand), and how much more will be required. We understand the President and Directors of the Blue Ridge Railroad Company to state that \$3,555,700 have already been raised. This includes the subscription of the City of Charleston, subscrip-

tion of the City of Charleston, subscription of the State of South Carolina, subscription in Tennessee, subscription of Pendleton Railroad, subscription in Georgia, subscription in North Carolina, Tennessee State aid for iron, Tennessee State aid for bridges, Charleston private subscription, additional subscription in South Carolina, and stock received by contractors for work done. This leaves a deficiency of \$3,944,300—call it \$4,000,000—the amount that will be required.

Where, then, and how is it to be obtained? The Company propose now to the Legislature to remove the condition on which a guarantee was granted for \$1,000,000 of the Company's bonds. This expended, there will still be a deficiency of \$3,000,000. The Company propose hereafter to induce the State to take \$1,000,000 more of stock, if need be. A deficiency of \$2,000,000 to be supplied, will still exist. It is not doubted that this amount can be borrowed on first mortgage bonds of the Company, now in their hands and undisposed of. Before this \$2,000,000 is needed the grading will be finished, the masonry completed, and bridges, drains and culverts built. The country has just emerged unscathed from a great financial crisis. We are now on the flood tide of increasing prosperity. The world is at peace, and has before it every prospect and inducement to continue at peace. Cotton, growing more and more in demand all the world over, is selling at prices to remunerate and enrich our people beyond example—for it is not based on a speculative mania, but on the solid foundation of a healthy demand and supply. Money is easy in this country and in Europe. In such a state of things, it would be strange if, after the expenditure of so large an amount on this great enterprise, and getting it in so favorable a condition of advancement to completion, money could not be borrowed on its first mortgage bonds. The thing would be anomalous, and is a supposition wholly unreasonable.

But suppose, by possibility, the endorsement of the State should become necessary to effect a negotiation of these bonds, and she should finally be called upon to give that endorsement. This will be the worst that can occur, under extraordinary circumstances. The road would then be finished, as a first class road, ready to yield profits for interest or dividends. The State would occupy the position of being stockholder to the amount of \$2,000,000. This amount she would have adventured in common with other stockholders in the enterprise, and would have to pay in installments. She would further be endorser on \$3,000,000 of the company's bonds, having as security therefor a first lien on the road, worth \$7,000,000, exclusive of the lien of Tennessee to the amount of \$640,000 on the portion in that State. Admitting the great value of the road, would this be a bad position for her to occupy? She alone of all the stockholders and bondholders would have the preference in the ownership of the property. Every dollar subscribed by Charleston and by citizens of South Carolina, Georgia, North Carolina, and Tennessee, and by the contractors who received it in payment for work done, must be hopelessly lost before the property of the State can be affected. We have already discussed the value of the enterprise, and the argument in its favor is thus complete, if the State can safely raise the means.

But it is urged that the State has already as much debt as she can safely shoulder. She has

on hand the building of a new State-house at a cost of \$3,000,000—a piece of downright extravagance. If to this be added \$2,000,000 of subscription to the Blue Ridge Road, and the endorsements—probably of \$1,000,000, but possibly of \$3,000,000—will she not incur obligations to cripple her finances and oppress her people with taxation for years to come? We answer no. The State can undertake both these projects and carry them through safely without embarrassment or any material increase of taxes. By an insignificant increase of the taxes, the interest on the stock will be provided for; and if the payment of her bonds are distributed during a period of say thirty years, the surplus profits of the Bank of the State are amply sufficient to meet the installments of principal at the rate of say \$200,000 a year. The State-house and Blue Ridge Railroad need not interfere and can both be built.

In taking this part in the enterprise, South Carolina would not embark, to an unusual extent, her means. Such enterprises on the part of States are neither rare nor strange. As the General Government has no right, it is the business of the States, according to our views, to undertake internal improvements. North Carolina has contributed \$3,000,000 for the Central Railroad to Salisbury, and contributes to the extension of that road to Murphy. Georgia, out of her treasury, has built the road from Atlanta to Chattanooga, at a cost of \$5,000,000. Virginia has expended \$3,000,000 on the Virginia Central Railroad across the Blue Ridge, and is undertaking, as a public work, the Covington and Ohio Railroad, estimated to cost \$12,000,000. South Carolina, therefore, is not called upon to do what other States are unwilling to do. It has already been shown that she is amply competent. She is one of the wealthiest States in the Union. Her financial condition and resources will compare favorably with either of her neighbors. Shall she now sink what is invested, and turn her back on this grand project, promising such mighty advantages within her power to realize? Shall she not then remove the condition imposed upon the guarantee already granted, with the prospect of being called upon to take stock to the amount of another million, and with the possibility of having to endorse the well-secured bonds of the Company to the extent of \$2,000,000 more? We say it becomes her to make the venture. We see no where else an enterprise on so great a scale or promising the same beneficial results. We, therefore, trust that, having maturely considered the subject, the members of the Legislature will return prepared, at their next session, to grant what is asked for the continuance of this magnificent work.—*Charleston Mercury*.

PROGRESS OF THE CONTRACTORS TO WIND UP THE M. & C. CO.

From the New York Times.

With respect to the recent proceeding in the Marietta & Cincinnati Railroad, we can state, on the most positive information, that Messrs. Robert Benson & Co. only invited their friends and clients interested in the proceeding to unite in intrusting the foreclosure to Mr. Samuel Hallett, upon the personal recommendation of Messrs. Dallas & Mason. Moreover, it was not until after the acceptance by Mr. Millard Fillmore, of a share in the conduct of it, as notified by letters now in existence from that gentleman,

that they consented to recommend their friends to join in the action, and they then issued the circular letter to this effect, lithographed in their own office, and intended as a private communication, which has since been published in these columns. It seems that our ministers in London and Paris know more about the commercial standing of individuals in New York than New Yorkers themselves. We leave the responsibility with them.

The Ten per cents. of the Chicago & Milwaukee Company, advertised by Mr. C. Knowlaski, as on private sale, and an income and second mortgage issue, with only \$512,000 first mortgage before it, on the Lake Michigan Shore Line, between the cities of Chicago and Milwaukee.

THE HALLETT CIRCULAR AGAIN.

So the Editor of the N. Y. Times:

About a month ago some mention was made of a gentleman bearing the name of Hallett, in connection with a highly-respectable London firm, interested in American State and Railroad investments. As the most contradictory statements have been recently in circulation about this person and his proceedings in relation to the foreclosure of the mortgages on the Marietta & Cincinnati Railroad for the benefit of foreign Bondholders, some reliable explanation will be satisfactory. So far as the responsibility of the London firm is concerned in endorsing the position of Mr. Hallett, the facts have been ascertained to be as follows: The firm in question represents a large number of Bondholders of the Marietta Railroad, and was invited by others to unite in taking steps to protect their interests under Mr. Hallett's guidance. Mr. Dallas and Mr. Mason gave unqualified testimony as to his ability and integrity; and, fortified as he was by nearly 100 letters of introduction from Ex-Presidents, Governors, Secretaries and statesmen of all classes, it would have been impossible to have withstood such an amount of cumulative evidence in his favor. The letter to which the name of the firm appears was entirely a private communication, intended for their own clients—already interested in the Roads—and was lithographed in their own office. The procedure of foreclosing the mortgages was unanimously intrusted to three (3) attorneys, of whom this Mr. Hallett is one—the terms are not unusual under similar circumstances—in fact, many a mortgageholder in this city would be glad to get his foreclosure effected on as favorable conditions. But recently all sorts of rumors, impugning the motives and affecting the credit of Mr. Hallett, have been in circulation on this and the other side of the Atlantic. Without, however, attempting to pass an opinion on the merits of this gentleman as an agent for foreigners, I can not but regret that United States Ministers at Paris and London should so readily commit themselves by endorsing the responsibility of an American not personally known to them in their own country. SPECTATOR.

EARNINGS L. M. R. E.

December, 1857.....	\$73,050 62
" 1858.....	94,670 91
Increase.....	\$21,620 28

C. H. & D. R. R. RECEIPTS.

December, 1857.....	\$42,291 40
" 1858.....	87,826 88
Increase 1858.....	\$5,535 48

COUNTIES MAY BE SUED IN THE UNITED STATES COURTS FOR BONDS ISSUED TO RAILWAY COMPANIES IN DEFAULT OF PAYMENT.

In the Circuit Court of the United States for the Western Pennsylvania District, was tried the case of *William McCoy vs. Washington county, Pennsylvania*, in which the following points were ruled by Judge Grier:

1. A County may be sued in the United States Courts.
 2. Where the bond covenants to pay the bearer thereof, the County is liable directly to the holder, who may sue in his own name.
 3. The Act of the Legislature authorizing County subscriptions to railroads, is constitutional, and the action of the County Commissioners in conformity therewith is binding on the County.
 4. C. J. Lovrie's opinion in *Thomas v. Commissioners of Allegheny*, approved.
 5. The Constitution of the United States does not forbid States or Counties from borrowing money and giving proper securities therefor, and such securities are not bills of credit within the meaning of the constitution.
 6. The coupons are to be taken in connection with the bonds to which they are annexed, and from established usage, are sufficient to establish the indebtedness of the county to the holder.
 7. The Contract of the County with the Railroad Company can not detract from the obligation of the County to pay the principal and interest of the bonds.
 8. The effect of the bond cannot be varied by parol testimony.
- The facts fully appear in the charge of the court, delivered by Grier, J.

Gentlemen of the Jury—The case on which you have now to render your verdict in an action of debt for interest due on certain bonds, called coupon bonds, issued by the Commissioners of Washington county.

The declaration sets forth, that the defendants "made certain coupon warrants, or promises to pay, in writing," in the form following:

"Washington County Bonds.—Warrant for thirty dollars interest on bond No. 123, payable in the city of New York, on the 15th of May, 1857.

"For the Commissioners,

"A. SILVEY, Clerk."

Sixty of these coupons, for thirty dollars each, payable at different dates, are claimed to be due and owing to the plaintiff as lawful holder.

The defendants plead they did not assume, and are not so indebted.

To support the issue, the plaintiff has given in evidence—

1. An Act of Assembly passed on the 12th of April, 1851, which, in sections 7, 8, 9 and 10, authorizes the citizens of Washington, at the next, or some subsequent general election, to decide by ballot whether or not the Commissioners of said county shall subscribe in its behalf, four thousand shares in the capital stock of the Hempfield Railroad Company, the returns of this election to be certified to by the Court of Quarter Sessions, and if the judges thereof ascertain that there is a majority in favor of such subscriptions, they shall make an order on the Commissioners to make the subscription.

The Commissioners are authorized to borrow money to pay said subscription, and to execute bonds or promissory notes in the name of the county, transferable on the books of the Commissioners, these bonds to bear an interest of six per cent., payable semi-annually, and may be received as cash by the Hempfield Railroad Company, in payment of installments.

2. The plaintiff has given in evidence, also, a certificate from the Court of Quarter Sessions, showing that such election was held, and that the citizens of Washington had decided, by a large majority of votes, in favor of making such subscription.

The will of the people of Washington county being thus ascertained, another Act of Assembly was passed on the 12th of February, 1852, authorizing the Commissioners to subscribe 4000 shares to the capital stock of the Company; to borrow money in behalf of the county, and to make provision for the payment of the principal and interest of the money so borrowed, as in other cases of loans to corporations.

The Commissioners are authorized also to issue certificates of loan or bonds in the name of the county, bearing an interest of six per cent., payable semi-annually, and transferable as may be directed by the Commissioners.

The railroad company are to receive these bonds as cash in payment of the stock subscribed; and the said company are also to pay or provide for the payment of the interest accruing upon said certificates of loan or bonds, until the said railroad shall be completed." The railroad company is moreover authorized to guarantee the payment of the principal and interest of the bonds.

In pursuance of this authority the Commissioners executed and delivered to the railroad company two hundred bonds of \$1,000 each, and fifty of \$5,000 each, with interest coupons annexed, in the following forms:

The court here read one of the bonds, with guarantee of the railroad company and coupons.

These bonds, in order to give them more value in the market, are made payable to the holder, and thus by contract made negotiable by delivery. If the Commissioners had power to bind the county for the payment

of the principal and interest of a bond, transferable by delivery, the coupons which are appended to them, are the appointed evidence, by the agreement of the parties to show who is entitled as holder of the bond to receive the interest due at a particular date. They are attached to the bonds for the convenience of the officers of the county, and to facilitate their negotiation, and thereby add to their commercial value. The obligation to pay the interest is to be found in the bond, not in the coupon. They are not in words an instrument, in writing of a commercial nature, and having their negotiability by virtue of the law merchant. In terms these warrants are not made payable to any particular person or his order, or even to bearer. They partake of the peculiar instrument to which they are attached. They are intended by the parties to be evidence of debt in the hands of the holder, and proof of payment when in possession of the debtor. They pass by delivery, and by the contract of the parties and the usage of the country are sufficient evidence of a debt to the obligors in the bond. They are of modern invention, and should have the effect intended by the parties and be governed by the usage of the country, and not by sharp rules of law applicable to instruments of different nature. The possession of them is, therefore, *prima facie* evidence, that the holder of them is holder of the bond, for was so at least, when they were cut off, and as such, entitled to receive the interest. See *Ohio vs. Commissioners of Clinton county*, 8 Ohio State Reports, (Ritchfield), 280.

The plaintiff has produced the bonds to which the coupons were attached with the exception of seventeen. Their execution is proved and admitted, and that they were delivered to the railroad company in payment for stock and to be used by them to raise money for the construction of the road. There is no allegation, or proof of any fraud practiced by the parties in the transaction. The plaintiff has shown a *prima facie* title to recover, if you believe the evidence, which will entitle him to your verdict, unless the defendant has established some sufficient defence, which we will now consider.

It is contended:

1st. That the county of Washington being merely a subordinate political division of the State of Pennsylvania, is not a citizen of this State, within the meaning of the Constitution of the Act of Congress, and, therefore, not suable in this Court.

To this we answer, that though the metaphysical entity called a corporation, may not be physically a citizen, yet the law is well settled, that it may sue and be sued in the Courts of the United States, because it is but the name under which a number of persons, corporations and citizens, may sue and be sued. In deciding the question of jurisdiction, the court look behind the name to find who are the parties really in interest. In this case, the parties to be affected by the judgment, are the people of Washington county. That defendant is a municipal corporation and not a private one, only furnishes a stronger reason why a citizen of another State, should have his remedy in this Court, and not in a county where the parties against whom the remedy is sought, would compose the court and jury to decide their own case. This point is, therefore, overruled.

2d. It is objected, moreover, to the jurisdiction of the court.

That the plaintiff being merely in the position of a mere assignee of the case in action sued upon, and the same being a case wherein a suit could not have been prosecuted in this court to recover on the contract if no assignment had been made thereof, this court has, under the Act of Congress, no cognizance for the recovery thereof.

This would be a valid objection if the plaintiff claimed as assignee of a citizen of the State of Pennsylvania. But he does not claim title through any such assignment, but as holder of the bond to whom the defendants have directly covenanted to pay the bond and interest. The indebtedness declared on, results from the peculiar nature of the security. The defendants have agreed to pay the interest to the holder of the bond, as well as the principal, and having not done so, they are directly indebted to such holder for refusing to pay according to contract.

3 We will next consider the question involved in the three following points:

3d. That the county of Washington being a public corporation, erected for purposes of local government alone, and standing upon no contract between the Legislature and the citizen—and the said Hempfield Railroad Company being a private corporation merely, organized for purposes of trade and commerce, and as a common carrier of merchandise and passengers beyond the limits of said county, the Commissioners thereof were not, therefore, authorized to embark either the credit or property of the people of said county in the hazards of such an enterprise without their unanimous consent.

4th. That if the same was done under the authority of an Act of the County Commissioners were, *pro hac vice* the agents of the Legislature only, and the contract so made was not the contract of the people of the said county.

5th. That as an exercise of mere power on the part of the Legislature, in thus practically compelling the people of one county to build railroads in another, and taking the freehold of the citizen without his consent for such a purpose, by authorizing a heavy incumbrance thereupon, the said Act of Assembly was not a legitimate exercise of the taxing or of any legislative power, inconsistent with the principles of natural justice, with the rights of property, and the fundamental law of every free government, and at war with the great principles enunciated in our Declaration of Rights, and equally at

war with the spirit and letter of the Constitution of the United States.

These three points may be said to contain a condensed argument against the constitutional power of the Legislature to authorize the Commissioners to bind the people of the county to pay debts incurred in these disastrous speculations.

This is the great question in the case, and if it were a new one which this court were compelled to decide without the light of precedents, we should feel oppressed with its magnitude and importance. But, happily, we are relieved from this responsibility. The Supreme Court of your State, the tribunal to whom alone is committed the high function of declaring the constitutional powers of the Legislature, have decided this question, and, to that decision, this court, and all the good citizens of the Commonwealth are bound to submit, as the declared law of the land. Although, in the course of this trial, I may have expressed opinions which I possibly might have entertained, had I been compelled to meet this as a new question; as a member of this court, I must instruct you that the law in question is constitutional, and that the Commissioners of the county had power and authority to bind the county in conformity with the provisions of the act already referred to; and if the bonds have been so issued and put in circulation, the county is bound by law, as well as by every principle of moral rectitude, to pay them to the *bona fide* and honest holders. Without further enlarging on this subject, let me refer all who feel desirous to have correct opinions on this subject, in a moral point of view, to an opinion lately delivered by the learned and able Chief Justice of your State.

The following points will be considered together:

6th. That if the instruments sued on here, or the bonds with which they are connected, were intended for circulation from hand to hand as a marketable commodity, they are bills of credit within the meaning of the prohibition contained in the first clause of the tenth section of the first Article of the Constitution of the United States.

7th. That the Act of Assembly of February 14th, 1852, authorizing the subscription by the Commissioners of Washington county, to the capital stock of the Hempfield Railroad Company, if the same amounted in effect to a lien upon the freehold of the citizen who holds under a patent from the Commonwealth, it is a law impairing the obligation of the contract between the State and the citizen, and is, therefore, in conflict with the first clause of the tenth Section of the first Article of the Constitution of the United States.

8th. That the said recited Acts of Assembly, in assuming the powers to take the property of the citizen, without his consent, for a merely private purpose, is equally a violation of the fundamental principles of Republican government, and is, therefore, in conflict with the fourth Section of the fourth Article of the Constitution of the United States.

1. In answer to the first of these propositions, I instruct you that the Constitution of the United States does not forbid States or corporations from borrowing money and giving proper securities therefor, and that such securities are not bills of credit, within the meaning of the Constitution.

2. Nor does a law authorizing a county to borrow money to make a railroad on the credit of the county, and to be paid by the imposition of a tax on the citizens thereof, infringe that article of the Constitution of the United States which forbids a State to make any "law impairing the obligation of contracts."

3. Nor is the Act of Assembly in question in violation of "the fundamental principles of Republican Government, and therefore, not in conflict with any article of the Constitution of the United States."

The sixth proposition of defendants is:

9th. That if the Act, under the authority of which this subscription is claimed to have been made, originated in the Senate, then, upon the principles on which such legislation has been sustained in this State, the Act, itself, as a money or revenue bill, would be unconstitutional under the twenty-first Section of the first Article of the Constitution of this State.—*Journals.*

To this I answer, that there is no evidence that said Act originated in the Senate; and if it did, it is not unconstitutional for that reason. It is not a bill to "raise revenue" for the State.

10th. The tenth instruction prayed for, is as follows:

That the instruments declared on, import no contract, in their terms, with the holder thereof by the defendant in this suit to pay the moneys referred to therein, and are not so executed as to change the defendants under the laws of this State.

The coupons *per se*, "do not import a contract in their terms with the holder," but taken in connection with the bond to which they were attached, they do; and from the established usage and contract of the parties, they constitute the proper evidence of indebtedness to charge the defendants.

11th. That if the papers in question were originally a part of a bond, or bonds, containing a stipulation for the payment of the interest referred to therein to the holder of the said bond, the remedy, if any, would be upon the bond itself, and the plaintiff must have set out and shown his ownership, and alleged an agreement on the part of the defendants to pay the same, in order to entitle him to recover.

This proposition is answered in the negative, for reasons already stated. See also the case in 8th Ohio Reports, already referred to. By the contract of the parties, these coupons are made evidence that the amount of interest stated is due from the county to the holder thereof.

12th. That the bonds issued by the defendants in payment of their supposed subscription to the capital stock of the Hempfield Railroad Company, are to be construed in accordance with the terms of the Act of Assembly under which the same were issued, and that, under the said Act, the defendant would not be liable for the payment of interest until the completion of said road.

To this we say—The Commissioners had their authority from the act, and that act authorizes them to borrow money to pay the stock. "to make provision for the payment of the principal and interest," and to issue bonds in the name of said county, bearing "an interest of six per cent., payable semi-annually." The provision that the Railroad Company should bind themselves to guarantee the principal and interest, and should pay it till the road is completed, does not annul the obligation of the bond; as between the county and the corporation, the county had a right to call on them to pay the interest. But as between it and the bondholders, the contract of the county is to pay both principal and interest. The guaranty of the Railroad Company adds to the security, but can not distract from it. The Commissioners have not mis-construed the act, or abused their powers in binding the county for the payment of interest, but pursued its true meaning and intent. On this point see also a case in point already referred to—8 Ohio State Reports, 280.

The thirteenth proposition is—

13th. That if the said bonds were issued upon an agreement by the company from which they have been purchased, that the defendants should not be called upon to pay the interest thereon, but that the same was to be paid by the company itself until the road was completed, it was an agreement, in effect, that the bonds should bear no interest so far as the defendants are concerned; and the same not being negotiable securities within the law merchant, are subject to all the equities which existed between the original parties, and the holders was bound to inquire before purchasing, and is affected with notice of the said agreement.

The written instruments show the contract of the parties—the parol testimony admitted can not affect it. What answer would it be, to an action on a note or bond, for the defendant to plead, that when he signed it his co-obligor agreed to lift it, and that he should never be troubled about it?

The fourteenth proposition is—

14th. That to entitle the plaintiff to recover in this case, he must first have shown an actual subscription in the manner prescribed by the Act incorporating the said company, or at least an actual subscription of some sort by the Commissioners; and that in the absence of any subscription, or of the issue and delivery of any certificate of stock by the said company, the issue of the bonds was without authority of law, and the defendants are not liable in this suit.

This proposition can not be admitted. The bond recites that it was for subscription to the stock. The witness has proved that they were delivered in such payment—whether there was literally a subscription, or written promise to pay, is of little importance if it was paid; also whether the county has got a certificate of stock, was a matter with which the holder of the bond had no concern, and is not bound to prove. If the county has no certificate, it can obtain it by suit, if refused. It can not now plead the negligence of its own agents in the management of its business, to avoid payment of its obligations. For any thing that appears, they have it, or can get it, and in absence of proof, the presumption is that they have it.

15th. That if no subscription was actually made by the Commissioners in the manner indicated by the law, no subsequent vote of theirs by proxy, supposing the same to have been duly proved, could cure the infirmity, or operate as an estoppel against the defendants.

This has been sufficiently answered in our remarks on the fourteenth proposition. If the bonds were delivered in payment for the stock, there is no infirmity to be cured.

16th. That taking the papers sued on to be warrants, or certificates of loan, under the Act of Assembly, it was essential to their validity, as such, that they should be signed by the Commissioners themselves, or a majority of them, and attested in the former case by their clerk, and authenticated in the latter by the seal of the county.

To this we answer, that the obligation of the defendant to pay both principal and interest, is to be found in the bonds, (as already explained,) which are properly executed by the commissioners, and bind the defendants to pay the interest as well as the principal.

17th. That there is nothing in the Act authorizing the said subscriptions to warrant the issue of any other securities than the bonds or certificates of the county therefor, in sums not less than one hundred dollars each, but that, on the contrary, assuming the instruments sued on to be promises or certificates of debt or loan, and to have been otherwise well executed, they are in direct violation of the provision which forbids the issue of any certificates for a less amount than one hundred dollars, and are, therefore, not obligatory on the defendants.—Act of '52.

The answer to this proposition is, that the Commissioners have issued no other securities than the bonds, and, as already stated, the coupons are made for the convenience of the officers, and as evidence that the holder is the person entitled to receive the interest due on the bond described therein.

This ends the catechism, and, as a result of the whole, the Court instruct you, that if you believe the testimony submitted to you by the plaintiff, he is en-

titled to your verdict, notwithstanding any testimony produced by defendant, and the many legal objections so ingeniously and ably argued.

The jury found a verdict for the full amount of the plaintiff's claim, \$1,910 70, which, being under \$1,000, prevents an appeal to the Supreme Court of the United States.

PACIFIC RAILROAD

A New Scheme—The Mexican Central Railroad—Air Line from the Rio Grande to Mazatlan—Views of the Projectors, &c., &c.

Within a few days past, some copies of a small pamphlet have been quietly handed round here, showing that there is a route through Mexico to the Pacific by which the vexed question of an inter-oceanic railroad may be settled, without trenching upon the treasury, the public lands or the constitution. This pamphlet has been prepared by a gentleman favorably known as a civil engineer and as an explorer of new countries.

A few intelligent and far seeing men have been for years engaged in maturing their plans for the execution of this project. They have secured a favorable grant from Mexico, giving exclusive right of way for ninety-nine years, perpetual possession, exemption from all duties on their materials, and free transit for all freight and passengers. Texas has given a charter for that portion of the transit east of the Rio Grande, with valuable privileges at the terminus on Aransas Bay. These privileges, with the usual grant of sixteen sections of land per mile, make this charter very valuable in itself, apart from its identity with the inter-oceanic transit. These two companies—Texan and Mexican—are co-operating, and are preparing to present the whole subject to capitalists in a proper shape. As most of the transit runs through Mexico, timid men might fear to invest means in it without some guarantee of security besides their right and their own power. Such guarantee is now sought from our own Government, in accordance with its avowed policy. This obtained, the combined companies will proceed promptly to the execution of the work.

The particulars of the project are contained in the following synopsis of the pamphlet above referred to:—If a line be drawn on a globe from New York tangent to the Gulf of Mexico, and prolonged each way, it will cut the Pacific coast near Mazatlan, and, passing near the Society Islands, will strike Australia near Melbourne; whilst, in the other direction, it passes over Boston, through New Foundland, and strikes the western coast of Europe. Upon lines contiguous to this air line may be concentrated more of the world's commerce than upon any other possible route between the Pacific and Atlantic oceans. But this route is especially important in reference to our own country. It runs from the extreme northeast to the extreme southwest of the Atlantic States, uniting the factories of the north with the cotton fields of the South, and both with the gold and silver mines of Mexico, whilst the whole inhabitable region east of the Rocky Mountains is also by it conveniently connected with our Pacific slope. From Portland in Maine to New Orleans, by routes proximate to the direct line, a connected line of railroads is nearly completed. Various roads from the Atlantic coast, from the great lakes, and from the chief cities in the valley of the Mississippi, are tending towards the south-west, and find their natural conjunction at Houston in Texas, whence a road is now under construction towards the Rio Grande, in the direction of Mazatlan.

This is the shortest possible railroad route from all the commercial cities of the Atlantic, the Gulf and the great valley, to the Pacific coast. It is also believed to be the only feasible railway to the Pacific, as it is the only one that can be built by private capital alone. It presents the distinguishing characteristic of being the farthest north that a short transit of the continent can be found, and the farthest south that a continuous railway can be had from the Pacific to connect with our present railway system. It also offers to trade the option of rapid motion by railroad for long distances, or the slower and cheaper motion by water, except for the short distance from Aransas Bay, on the one side, to Mazatlan, on the other. This land transit will not exceed seven hundred miles. A good harbor may be had at Aransas Bay, at a moderate cost; add it is the furthest south that it is possible to make a good harbor on the west coast of the Gulf of Mexico. The route thence to the Pacific, near Mazatlan, is exceedingly favorable for a railway. The ascent to the table land is gradual, and presents no engineering difficulties. Natural gaps afford easy passage through the mountains. The table land affords a smooth and level way to the western slope, down which the route descends, in a broad, smooth valley, to the bench along the Pacific coast. The Rio Grande is the only stream of any magnitude to be bridged. Food, labor and materials are abundant on most of the route. The climate is mild and salubrious. The road may be built and worked as cheaply as any road of equal length anywhere on this continent. It is estimated that fifteen millions of dollars will cover the cost of a single track from port to port, with all necessary appliances for a successful business, and that ten millions more add a second track, with the appropriate increase of machinery.

When all the connections shall have been made to Mazatlan, as now contemplated, the time for mails and passengers from New York to Mazatlan, will not exceed five days, and thence to San Francisco the time by steamship is four days. But when California shall have made a railroad from San Francisco to the mouth of the Colorado, steamers may run from Mazatlan, to the head of the Gulf of California in two days, and thence the mails may go by railroad to San Francisco in one day, making eight days from New York to San Francisco. The passage from England to Australia, by this route, also, will be ten days shorter than by Panama.—*Correspondence, N. Y. Herald, Dec. 28.*

COVINGTON & LEXINGTON R. R.—The holders of the second mortgage bonds of the Covington and Lexington railroad have, to a considerable extent, agreed, and the contract will no doubt be signed by a majority, to make the holders of third mortgage bonds parties to the suit now pending for the sale of the road; the latter to purchase the property in the event of a sale, and to pay the interest on the second mortgage securities. In the event of a failure to comply with these terms, the right is reserved by the second class of creditors to sell the property under a supplemental proceeding, in sixty days after the interest becomes due. Under this arrangement, should the Court order a foreclosure, the third mortgage bondholders will obtain control and direction of the road, cutting off stockholders and other creditors. The road would then be liable for the first, second and third mortgages only.—*Gazette.*

THE CINCINNATI, WILMINGTON & ZANESVILLE RAILROAD BILL.

The following is the bill now before the Legislature, authorizing the extension of the C. W. & Z. R. R.:

A Bill, authorizing the issue of Preferred Stock for the extension of the Cincinnati, Wilmington & Zanesville Railroad:

Whereas, The Cincinnati, Wilmington and Zanesville Railroad Company has completed its road from Zanesville to Morrow, but is unable for the want of means to complete the residue of its line from Morrow to Cincinnati, or any intermediate point; and

Whereas, About one million of dollars of its capital stock remains undisposed of, and is the only means by which the corporation can extend the unfinished part of its line; and, to that end, it is necessary that said corporation should have the power to provide that the stock subscribed or disposed of for such extension shall be made, as to such extension, a preferred lien thereon; Therefore

Section 1. Be it enacted by the General Assembly of the State of Ohio, That the directors of said corporation be, and they are hereby authorized to receive subscriptions for, or otherwise dispose of, the whole, or such part of the said capital stock yet unissued as may be necessary in the making and finishing of said extension, or any part thereof, on such terms and for such price as they may deem expedient.

Sec. 2. That said stock so to be issued shall be denominated "extension preferred stock," and shall constitute the first lien on the said extension; and shall, also, be entitled to an equal participation with the other stock in the said road as now finished.

Sec. 3. That the moneys realized by the subscription, or other disposition of said preferred stock, shall be appropriated to the extension of said road from Morrow to Cincinnati, or to such intermediate points, on the line to be selected, as may be determined upon.

NOTE.—This bill provides for the extension of the line "from Morrow to Cincinnati, or any intermediate point," but on the debate it was stated by its friends that the design of the Company was to extend the line to Glendale now, and connect for the present, with the Hamilton & Dayton Road.

COLUMBUS & XENIA RAILROAD.—The annual election was held at Columbus on Tuesday, and resulted in the choice of the following Directors:

William Dennison, jr., of Columbus; Robert Neil, Columbus; Alfred Kelly, Columbus; L. Goodale, Columbus; Wm. R. Hubbard, Columbus; D. W. Deshler, Columbus; J. R. Swan, Columbus; R. R. Springer, Cincinnati; Larz Anderson, Cincinnati; C. H. Kilgour, Cincinnati; Abram Hivling, Xenia; Simon Gebhart, Dayton.

The Board organized and elected Robert Neil, President.—Mr. Dennison positively declining a re-election. Mr. D. returns to the active duties of his profession, as a lawyer.

The other officers of the Company were re-elected.

The stockholders ratified the contract with the Dayton, Xenia & Belpre R. R.—*O. S. Jour.*

A PRIMITIVE LOCOMOTIVE.—I recollect Geo. Stephenson's father. It was, I think, in 1812, that Mr. Stephenson and Mr. Wood came to my house, then at Newburn; and after we had dined, we went and examined the locomotive then on Mr. Blackett's wagon-way. At that early date, it went by a sort of cog-wheel; then there was something of a chain to it. There was no idea that the machine would be sufficiently adhesive to the rails by the action of its own weight; but I remember a man going before—that was after the chain was abrogated—and scattering ashes on the rails in order to give it adhesiveness, and two or three miles an hour was about the progress. What has happened since? "We ride the whirlwind, and direct the storm."—*Speech at Newcastle, by Hugh Taylor.*

DAYTON & GREENVILLE RAILROAD.—The following gentlemen have been elected Directors of the Dayton & Greenville Railroad:

Peter Odlin; Thomas Parrott; H. C. Stimson; David Studybaker; John Wharry; Adam Speice; Wm. L. Darrow; John H. Achey; Herman Gebhart; James McDaniel; E. F. Drake; F. De Peyster, New York; James Thomas, New York.

☞ We give in another part of to-day's paper, some very interesting law decisions.—They will repay perusal.

Total.....	\$129,561 32	\$98,441 63
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THE MOUNT CARMEL & ST. LOUIS R. R.—The prospects of the Western end of this road are decidedly favorable. In Jefferson county the work has been commenced in good earnest, and the early completion of the road from the Illinois Central Railroad to Mt. Vernon, is fixed beyond a reasonable doubt. The Mt. Vernon *Star* of the 26th ult., says: "The company have already commenced the work with a large number of hands, and have also advertised for five hundred more—a number sufficient to complete the work in less than two months; and in all probability, when spring again opens announcing the approach of the summer of 1859, the shrill whistle of the locomotive will greet the ears of our citizens, and our village, isolated from the rest of the world by roads, which, during a great portion of the year, are almost impassable, will possess the advantages of a direct and easy communication with the principal emporiums of manufacture and trade, and will present the various signs of enterprise, improvement and thrift, characteristic of railroad towns.

The last number of the *Fairfield Gazette* contains a copy of a contract recently entered into between the County Court of Wayne county and Messrs. Vandewer, Smith & Co., of New York, by which the last named party agree to construct and equip a road from the West line of Wayne county to the Eastern line, and take payment therefor in Swamp Lands at five dollars per acre. If the contract is promptly ratified by the citizens of Wayne county, the company promise to have the cars running from Mt. Vernon to Fairfield by the 25th of December, 1859.

RAILROAD LAW.—The Harrisburg (Penn.) Union says that the following "rules of the road" are all based upon legal decisions, and that they ought to be universally made known:

"It has been legally decided that applicants for tickets on railroads can be ejected from the cars if they do not offer the exact amount of their fare. Conductors are not bound to make change. All railroad tickets are good until used, and conditions 'good for this day only,' or otherwise limiting the time of genuineness, are of no account. Passengers who lose their tickets can be ejected from the cars unless they purchase a second one. Passengers are bound to observe decorum in the cars, and are obliged to comply with all reasonable demands to show tickets. Standing upon the platform, or otherwise violating a rule of the company, renders a person liable to be put from the train. No person has a right to monopolize more seats than he has paid for, and any article left in a seat while the owner is temporarily absent, entitles him to the place upon his return."

A meeting of bondholders in the Indianapolis Junction Company will be held at the Eagle Insurance Office, No. 73 West Third street, on Saturday afternoon of this week. This meeting is to be composed of holders of the class of bonds secured by mortgage to W. K. Bond and C. Jones, on real estate in this city.

The Cincinnati, Hamilton & Dayton Company was ready, several days since, to pay the interest on its First Mortgage Bonds, falling due on the 20th.

MISSISSIPPI CENTRAL RAILROAD.—We solicit the attention of our readers to the communication, in another column, from W. Goodman, Esq., President of the above road, which, commencing at Canton, Miss., where it connects with the New Orleans & Jackson Railroad, runs north to the Memphis & Charleston road, intersects with it at Grand Junction, and connects there with a railroad on which the cars are now running to Columbus, Ky., eighteen miles below Cairo. A steamboat, as we learn from the superintendent of the Illinois Central Railroad, is now about to run between Columbus and Cairo, and so place our city in rapid and almost continuous railroad connection with the great Western and Northern cities.

The only gap in this connection, besides that between Cairo and Columbus, is one of sixty-six miles on the Mississippi Central road, and, to open this to the locomotive, the company needs assistance. This gap can be so opened by November, 1859, with an amount of three hundred thousand dollars, which the company wish to obtain on the basis of their "first and only mortgage seven per cent. coupon bonds." The security offered is undoubted, and we trust the President's statement will meet with due consideration.

Mr. Goodman, President, Mr. W. F. Mason, treasurer, and Dr. Vaiden, one of the directors of the road, are now in the city for the purpose of endeavoring to negotiate the bonds.—*N. O. Pirquene.*

THE KENTUCKY MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of **Col. E. W. MORGAN**, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance.

Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board.

Jan. 5th.

PROSSER'S PATENT

Original Lap-welded Iron and Steel Boiler Tubes, Laps from end to end.

Paris Patent Enamelled Iron Pipes and Pumps for water supply, acids, &c. Sole Importers.

PROSSER'S PATENT

Surface Condensers for high pressure steam with sea or other bad boiler water. Gauges, three cutter drills, Countersinks, Tube and cutting bars, Expanders, Tube scales, Steel wire and whalebone brushes, Pull Lever wrenches. Tubes, plain or enamelled, screwed together for artesian wells, Steel for Rollers.

Jan. 5th.

LANE & BODLEY MANUFACTURERS OF WOOD WORKING MACHINERY,

AND

CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Mortising Machine and all Machinery used in Rail Car Shops.

Corner John and Water Sts., CINCINNATI, O.
Jan. 5th.

APPLEGATE & CO., Booksellers, Publishers, Stationers & Blank Book Manufacturers,

43 Main St. Cincinnati, O.

1,200 Kegs No. 1 Railroad Spikes, 5 1/2 by 9-10th, Corby, Gossin & Co's make for sale very low by
TRABER & AUBERY,
7 Public Landing

DINSMORE'S PUBLICATIONS.

RAILROAD GUIDE AND ROUTE BOOK (established in 1850.) The only 112 Guide & way-book correct. Price, with maps, 25 cents. Cheap edition, 12 cents.

THIRTY MILES AROUND NEW YORK. 1,000 Places, and "how to find them." Price, 12 cents.

TRICKS AND TRAPS OF NEW YORK CITY. Illustrated.

Four Numbers 10 cents each.

No. 5.—Tricks and Traps of Horse Dealers. By "Frank Forester." 10 cents. *Now ready.*

No. 6.—Tricks and Traps of the Quaker City. (In preparation.)

No. 7.—On Courtship and Marriage. (In preparation.)

No. 8.—Tricks and Traps of Chicago. *Now ready.*

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Ten cents per number. All sent free by Mail, (Peddlers supplied at a great discount.)

DINSMORE & CO.,
9 Spruce Street, New York.

McCALLUM, BRISTOL & CO.,

BRIDGE & DEPOT BUILDERS.

McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Missouri, Iowa, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 29 Third St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y.

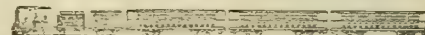
Ag. 26.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned, **THEODORE DEHON,** at Broadway, New York.

no13 10 Wal

Winter Arrangement.

BALTIMORE AND OHIO



RAILROAD.

GREAT NATIONAL ROUTE.

TERMINATES AT WASHINGTON AND BALTIMORE, on the East, and Wheeling, Beilwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

West, South-West and North-West.

TWO TRAINS

Leave Wheeling daily, at 12:30 P. M., and 10:26 P. M.

Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.

L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

ENGINEERING!!

The undersigned is prepared to furnish

SPECIFICATIONS, ESTIMATES, AND PLANS,

(in general or detail) of all kinds of

Steam Vessels, Engines, Boilers, Mill Work, &c

Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,

And Railway Machinery of every Description,

While under construction.

AGENT FOR THE PURCHASE of, on commission, all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for

ASHCROFT'S STEAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK,

Also, for Water Gauges, Indicators, Steam Whistlers

CHAS. W. COPELAND,

Consulting Engineer.

64 Broadway, N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

9 A. M. and 11:30 P. M. via **LITTLE MIAMI RAILROAD**, connecting at Columbus with the **CENTRAL OHIO RAILROAD**.

Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

Connections at MORROW with the CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:25 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:35 P. M.

Inquire for Tickets via **BALTIMORE & OHIO RAILROAD**.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent.

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting. Office, No. 66 West Third street, Cincinnati, O. may13.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

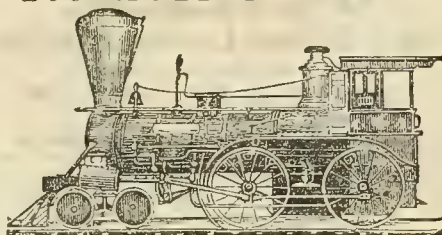
And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Jesteru Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

CINCINNATI LOCOMOTIVE WORKS.

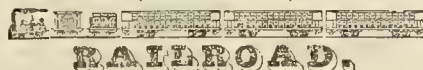


The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20

MOORE & RICHARDSON.

1858 CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO & MISSISSIPPI (BROAD GAUGE)



RAILROAD.

**TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,**

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
Jan 8 17 119 Walnut st., Odd Fellows' Building

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:06 A. M.—Richmond, Indianapolis and Chicago Express.

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities. Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via Delaware Cut Off.—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cuyahoga for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky, with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:10 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 3:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Hand Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw 4 and 10 in. Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

Union Works, Baltimore.

POOLE & HUNT, Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULRIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT, STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,
No. 112 MAIN STREET,
East Side, between Third and Fourth Streets,
KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,
Printed to order in the best manner.

Ruling done to order, of any Pattern.
Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

SCHENECTADY Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding their work to any part of the country, without delay.

JOHN ELLIS, Agent.
WALTER McQUEEN Supt. Aul6.ly

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1858.

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, may tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

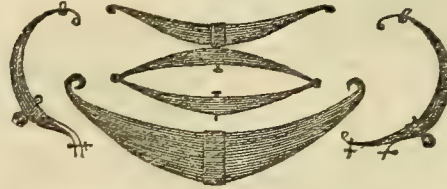
For plans, or reference from fifty-eight different railroads in the United States and Canada, please address Respectfully Yours,

D. M. CARHART,
Box 183, Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

Removed to No. 67 West 6th St.
CINCINNATI O.

MCDANIEL & HORNER, LOCOMOTIVE AND CAR SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R. R. Co.

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

BUSH & LOBDELL, Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES.

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE FLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

an23

TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.
Its welding nearer perfect, and its durability superior.

Unlike other new forms of rail, it can be put down upon the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be had by addressing
E. W. STEPHENS,
Cincinnati Ohio.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 48 lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by
Mareb. 1858. VOSE, LIVINGSTON & CO.,
F. 25, 11. 9 South William St., N. Y.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high-pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by
CHARLES W. COPELAND, Gen. Agent,
jy30 No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

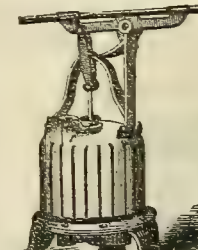
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

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SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—17

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING,.....DEC 13, 1879.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING,

By WRIGHTSON & CO.

Office No. 167 Walnut Street

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☞ The December business of the Rock Island Road was as follows:

Passengers.....	\$29,919 52
Freight.....	27,299 18
Mails, etc.....	3,600 00
Total.....	\$60,215 60
December, 1857.....	90,309 17
Decrease.....	\$30,093 37

The Cleveland, Columbus and Cincinnati Railroad has declared a dividend of 5 per cent for the six months ending December 31, payable February 1. The transfer books will be closed from the 20th of January to the 1st February. The New York stockholders will be paid at the Phenix Bank.

The Supreme Court of the United States at Washington, has decided in favor of railroads using eight-wheel cars, for which Ross Winans claimed a patent. The decision is of great importance to railroads, giving them the right to use eight-wheel cars.

No. 47.—Vol. 6.

RAILROADS OF THE NORTH-WEST AND THEIR EFFECTS ON PRODUCTION AND LABOR.

In our last number we stated the actual number of completed miles of Railroad in the North-west, including Kentucky and Missouri. We shall now advert to what those roads have accomplished in the production of wealth, and the employment of labor. First, however, let us take a connected view of the whole, as related to surface.

The following table represents the relation of roads to surface:

	Miles of Road.	Square Miles.	Ratio.
Ohio.....	2,841	39,964	1 to 14
Indiana.....	1,849	32,909	1 to 18
Illinois.....	3,477	55,465	1 to 22
Michigan.....	718	56,243	1 to 80
Wisconsin.....	636	63,924	1 to 83
Iowa.....	247	50,914	1 to 200
Missouri.....	287	67,780	1 to 180
Kentucky.....	269	37,680	1 to 140

These States comprise about 400,000 square miles. If they should complete only one-half as large a proportion of Roads as Ohio, they must still have about 6,000 miles more than now exist, and if they was large in proportion as Illinois, they must have 10,000 miles more. Probably, this will be the result, especially in the States of Iowa and Missouri, which have both the need and the resources to construct them. In all probability these eight States will have sixteen thousand miles of railroad within a very few years. When that is the case, the farming lands of Iowa, Missouri, and Kansas will be worth as much as those of Ohio are now. Let us look then into the relative influence of Railroads on the value of land, and the employment of labor. In 1850, Ohio had not over one hundred miles of railroad in active operation; the part then completed being a portion of the Cincinnati and Cleveland Line. In 1852, there was 1,154 miles completed, and in 1858, there were 2,841 miles. The value of land, at these several periods, were as follows, viz:

In 1850.....	\$341,388,538
In 1852.....	363,490,901
In 1858.....	590,285,947

The increase from 1850 to 1858, in the value of real property, \$218,897,109—or 64 per cent. The increase of population in that time is about 22 per cent, or little over one third the actual increase in the value of property.

Thus two-thirds this increase in the value of property is due to some other cause than the increase of population, which represents the permanent improvement made by labor. What other cause have contributed to give this additional value of 40 per cent., to the real property of the State? Undoubtedly, the increase in real money, by the increase of the gold mines of California, has had something to do with this increase of value. But, if we say that the whole property of the country has increased ten per cent. since 1850, in consequence of the increase of

money only, we shall probably be quite up to the mark. This leaves 30 per cent. to be attributed solely to increased facilities of transportation. That this is so in Ohio, we know by actual observations. We can not be mistaken in saying that the increased value of land in Ohio is mainly due to the increased price of produce, and that increased price is again due chiefly to the ease and readiness with which produce is carried to the great markets of New York, Philadelphia, Boston, and Baltimore, all of which are now reached by excellent lines of railroad from every quarter of this State. The amount of value added to the property of this State, by the construction of railroads since 1850, is about one hundred and ten millions of dollars. This is more than the entire cost of all the Roads in this State! Had the holders of real estate in Ohio been taxed fifty millions of dollars, to make railroads, they would have thought it an act of most enormous oppression. But they would have made fifty millions clear profit by the operation, and left all the Roads of Ohio without a dollar of debt. As it is, the owners of real estate have the benefit, and the Roads have the debts. In the harsh judgment which is some times passed on the managers of Roads, it should be recollected that the enterprizes they have undertaken, and the debts they have made, have conferred inestimable benefits on the great public. They have risked their own reputation, and often times lost their property in carrying forward enterprizes which have resulted in the wealth, and prosperity of the people.

2. Let us look at the effects of railroads on the employment of LABOR. To furnish full employment for labor, is the most desirable function to be performed by any of the arts of life; for, it both employs those, who might be otherwise idle, and it furnishes a market for large amounts of the produce of agriculture and other arts which would not otherwise exist. We have ascertained that there are, in round numbers, ten thousand able bodied men employed on the railroad operation of Ohio, independent of construction. This ten thousand men are equivalent (according to the usual ratio,) to a population of 60,000 people. The money actually paid these employees (these are skilled laborers,) is fully equal to five millions of dollars per annum. Then this 60,000 people must buy bread and meat of the farmers, and this is equal to 90,000 barrels of flour, and 30,000 cattle. Thus the railroads have furnished a new market for labor, and a new market for agricultural produce.

In this brief review, we have sketched only a part of the profitable results which attend the construction of railroads, in this State. When so many persons censure their management, we should recollect what they have done.

UNLAWFUL CALLINGS PURSUED IN NEW YORK.—The New York *Herald* presents the following statistics, exhibiting the amount of vice at present existing in that metropolis:

	No. of Shops, etc.	Persons engaged.	Money made annually.
Ticket Swindling.....	9	27	\$45,000
Mock Auctions.....	12	100	60,000
Lottery Dealers.....	35	110	1,000,000
Policy Dealers.....	450	2,000	3,650,000
Gambling Hells.....	75	505	.....
Low Houses of Prostitution.....	225	3,000	3,000,000
Bogus Hotels.....	4	10	10,000
Fortune Tellers.....	26	25	26,000
Obscene Publishers.....	25	..	20,000
Street Prostitutes.....	..	500	500,000
Runners for above institutions.....	..	300	300,000
Professional Street Beg- gars.....	..	220	60,000
Low Groceries.....	4,000	7,000	4,600,000
Total.....		13,598	\$12,671,000

By the above statistics it will be seen that the estimated average receipt of persons engaged in the various walks of vice and minor crimes is nearly \$1,000 a year each. If this be thought too high, and the half were estimated to be a fair average, it would make the amount of depredations of these classes of persons (which does not include burglars, counterfeiters, shop-lifters, etc.) equal to over six millions of dollars annually.

WHAT IS PROJECTED FOR THE PRESENT.—The New York *Herald* publishes a review of the vast works on which the labor and capital of the men of to-day are being expended, or are about soon to be expended:

Pacific Railroad—the American lines	\$450,000,000
Pacific Railroad—one British line.....	150,000,000
Suez Ship Canal.....	40,000,000
Nicaragua Ship Canal.....	24,000,000
Niagara Falls Canal.....	10,000,000
Lake Erie and Michigan Canal.....	18,000,000
Toronto and Georgian Bay Canal.....	15,000,000
Lake Champlain and St. Lawrence Canal..	5,000,000
Ohio Falls Canal.....	5,000,000
Tehuantepec Route.....	10,000,000
Honduras Railroad.....	7,000,000
Central Mexican Railroad.....	15,000,000
The Victoria Bridge over the St. Lawrence at Montreal.....	10,000,000
Alps Tunnel.....	5,000,000
Hosic Tunnel.....	2,000,000
Bergen Tunnel.....	715,000
Atlantic Telegraph—second line.....	2,500,000
Atlantic and Pacific Telegraph.....	1,500,000
Grand total.....	\$710,715,000

This table suffices of itself to give an idea of the immense activity of the age.

RAILROAD MISCELLANY.

The gross earnings of the Panama Road for the year are about \$1,500,000; out of which, after the payment of expenses and interest, twelve per cent. dividends have been declared. A reserve of two per cent. has been deposited in the Trust Company for a sinking fund for the redemption of the debt, and a surplus of three per cent. remains in the treasury. The construction account having reached \$8,000,000, has, according to a resolution of the Board adopted some time since, become closed. The amount needed for construction purposes is now very light, and will be charged to operating expenses. One feature of the traffic of the past year will surprise parties who have not watched the progress of this Company; it is that the freight earnings upon merchandize and treasure are greater than the passenger earnings.

The freight business, belonging legitimately to this Isthmus, is constantly increasing, and bids fair soon to place the Panama Company in an independent position, beyond the influence of any competition. The receipts of the New York Central Company continue to be reported at \$100,000 less than for the same month of last year. The decreased receipts of the Erie Road in that month were \$154,000. The settlements with Western Roads will, however, be much more favorable than they were in December, 1857, and the earnings, it is thought, will show less than \$50,000 falling off. The December receipts of the Galena Road are placed by rumor at \$81,000, of Rock Island at about \$65,000, and of Chicago, Burlington and Quincy at about \$70,000. The impassible state of the country roads during the month has cut off a large amount of traffic.

The November earnings of the New Albany and Salem Road were.....\$51,889 52
Ordinary expenses.....26 295 87

Balance.....\$35,493 45
Extraordinary expenses.....13,529 54

Net earnings.....\$12,023 91

The Milwaukee and Mississippi Railroad Company are paying interest on their First Mortgage Bonds due 1st inst. by drafts on Milwaukee, as usual. The winter business on this Road is equal to the expectations of its friends, and for the year ending 31st December, will be quite up to the previous one. The Harlem receipts show an increase of about \$25,000 on the same month of last year.

The night Albany train recently placed upon this road is doing a large business.

The New Haven and New York Railroad receipts for December were:

Passengers.....	\$73,065 16
Freight.....	13,000 00
Total.....	\$86,065 16
Less due other roads.....	19,754 94
Leaving.....	\$66,350 22
Receipts for December, 1857.....	53 304 54
Increase.....	\$12,745 68

The December earnings of the Brooklyn City Railroad were \$33,364 17. The annexed table gives the monthly earnings for the past four years:

	1855.	1856.	1857.	1858.
January...	\$24,045 16	\$22,256 71	\$24,515 29	\$26,880 12
February...	18,878 49	13,808 17	23,858 81	21,087 63
March.....	22,883 27	21,263 84	25,643 74	26,518 47
April.....	24,767 97	26,917 93	29,369 76	30,195 24
May.....	29,785 54	31,321 16	34,725 34	34,238 44
June.....	30,982 51	30,764 64	37,317 43	37,004 69
July.....	31,084 45	34,924 91	38,849 69	39,400 52
August...	31 917 28	30,621 00	37,976 14	40,728 16
September.	31,319 22	30,311 37	37,620 89	39,448 19
October...	32,077 38	32,892 85	33,2 496	39,252 88
November.	27,901 50	28,657 81	28,384 06	33,754 00
December..	25,249 60	27,853 41	26,491 46	28,364 17
Total....	\$330,881 91	331,803 80	377,497 57	403,552 58

This shows a steady increase of earnings, which will no doubt continue. The road is twenty miles long, of single track, and has no debt of any kind. The capital is \$1,000,000. The earnings of the year ending September 30, were:

Earnings.....	\$395,026 30
Expenses.....	288,771 22

The number of passengers carried was 7,705 839, and the number of miles run was 1,994,185. The road divided \$80,000 in dividends, or eight per cent., with a surplus of \$18,778 85. The total amount to credit, of surplus account, is \$38,346 73, and the amount of cash in the treasury on the 1st of October, 1858, was \$30,878 56. This is a clean record, and justifies the price (113) at which the stock is selling. The Company intend to build over the foot of Fulton street, so that passengers can pass direct from the boats to the cars, without going from under shelter.

The bonds of Franklin county, Ohio, \$50,000, which matured on the 1st inst., were promptly paid.

Direct and rapid communication between Chicago and Philadelphia, via Pittsburgh and Fort Wayne, is now complete and regular. The first through freight train left Chicago on the 29th ult., from the new station on the west side. It consisted of flour and other articles. A Chicago paper says:

"We notice the receipt of goods in six days from New York by the Pennsylvania Central, and Pittsburgh, Fort Wayne and Chicago Railroads. Goods are arriving now by this route with regularity and dispatch. This is equal to five days from Philadelphia."

The annual report of the Fitchburg Railroad Company is a very satisfactory production for stockholders to peruse.

The total receipts for twelve months ending Nov. 30, were.....\$572,967 61
The Expenses were.....294,112 00

Net earnings.....\$278,855 61

The earnings show a diminution of \$52,863 57 in comparison with the preceding year, while the expenses show a decrease of \$75,038 63; the net earnings are \$22,175 06 greater than for the year 1857, and the result of the year's business is unquestionably the best the Company ever experienced. After paying the January dividend there will remain on hand in cash or its equivalent \$96,347 78, which sum the Company have to commence another year with, and is that much in reserve to meet the only debt of the Corporation, which is \$100,000, due in June, 1860. The Company has also property which it will never need for railroad purposes, worth \$43,722 04. It has also \$32,742 96 worth of fuel on hand, and \$14,134 28 in materials which are used for ordinary repairs. The Company has never paid one cent of extra interest, nor has it paid interest in any way upon borrowed money for more than two years, except eleven dollars, and the interest on the \$100,000 debt. All its dealings are for cash, and the Directors do not see that the Company will ever have occasion to borrow money again. The report contains some very wholesome remarks in regard to railroad management, and it should be read by every stockholder.

CENTRAL RAILROAD AND BANKING COMPANY OF GEORGIA.

We have before us the Annual Report of the President of this road, with the accompanying documents, from which we make interesting extracts.

The earnings of the Road for the year ending with November 30th, 1858, have been..... \$1,353,722 00
The ordinary current expenses have been..... 541,126 38

The extraordinary expenses have been..... \$812,595 62
36,980 70

Leaving as actual net revenue for the year..... \$753,614 92
subject, however, to the payment of \$28,000 rent of line from Gordon to Eatonton on the first day of April next.

The cash payments into Bank from the road up to this date have been as follows:

From Earnings prior to 1st December..... \$64,295 69
From Earnings prior to 30th of November, 1858..... 1,204,555 05

The earnings from the Banking operations have been..... \$1,318,850 74
55,889 29

Total cash from Road and Bank..... \$1,374,740 03

It was represented, in the last Annual Report, that the balance *uncollected* (December 1st, 1857,) of the earnings prior to that day was \$57,773 94. An error occurred by depositing the sum of \$7,568 32 to the Forwarding Agent's credit, when the same should have been credited to this account.

Thus, the then uncollected balance was \$65,342 26, instead of \$57,773 94.

The entire balance (except \$1,046 57) has been paid: of that amount, the sum of \$130 07 is due at Savannah, and \$977 83 at Macon. About half of it will yet be collected, showing a loss of only \$500 on a revenue of over a million.

Of the earnings from the year ending 30th of November, 1858, there has been collected..... \$1,254,555 05
Leaving uncollected..... 99,166 95

\$1,353,722 00

The cash received during the year, viz:..... \$1,274,740 03
has been disposed of in the following manner:

Paid ordinary road expenses... \$541,126 38
Paid extraordinary road expenses..... 56,980 70
Paid bank expenses, interest and profits..... 24,300 52
Paid dividend 5 per cent. June last..... 199,744 00
Carried to reserve June last.... 93,435 65

\$315,587 25
And there has been a dividend 5 per ct. declared this day.... 199,851 00

1,115,428 25

Leaving to be carried to reserve fund..... \$259,301 78

This fund is subject to the rent of \$28,000 to the Gordon and Eatonton line, payable 1st April, and to such losses and depreciation of assets as may occur in our business.

Over and above the assets above enumerated, the Company has on hand old rails in the yard at Savannah, heretofore taken up and replaced with new rails of the value of \$28,000 00.

Three hundred tons of rails have been ordered from the Lackawanna Iron Company. It is expected that during the present year the 1,000 tons of old rails on hand will be re-rolled at the new excellent rolling mill at Atlanta, and that there will be taken up and

re-rolled during this year about five hundred tons more. The cost of re-rolling the 1,500 tons, and of transporting the same to and from the mill, will be \$48,000, or \$32 per ton. The cost of the 300 tons new rails will be \$16,200. The cash expenditure for rails during the current year, will, therefore, be \$64,200; and the number of miles of road re-laid, in the course of the year, will be 25. After this year no more iron will be purchased, and it is believed that it will not be necessary to take up and re-roll over 1,875 tons of rails, at an annual expense of \$60,000 to keep up the road.

The contingent liabilities of the Company are as follows:

As endorser of the Bonds of the South Western Company..... \$200,000 00
As endorser of the Bonds of the Muscogee Company, secured by mortgage of their Road..... 175,000 00

Total..... \$375,000 00

There is no doubt that these Bonds will be paid by the Companies, respectively, as they shall fall due.

The *ordinary* expense for the year has been less than the ordinary expense of the year preceding, though the gross revenue shows an increase of \$231,076 15. The ordinary expense of the half year ending 30th November, 1857, was \$260,734 50, with a gross revenue of \$500,013 30. The ordinary expense of the half year ending 30th ultimo, has been \$268,114 30, with a gross revenue of \$761,931 86. The extraordinary expense of the year has been much less than in 1857. These facts, in part, serve to illustrate the good management and economy of the late superintendent, Mr. Foote.

Allusion was made in the last annual report, to the subject of State aid to build new and competing roads, and the confident hope was expressed that the Legislature would not grant the aid sought for to build rival roads.

The idea seems to have prevailed to a considerable extent, that the State, *if secured beyond all doubt*, might endorse the bonds of railroad companies to any extent without danger to the public weal. We think, however, that the idea is erroneous. Let it be admitted that, through personal responsibility of stockholders, fastened on their whole property as a mortgage or by other means, the State could not possibly lose by its endorsement, and yet it is plain that the public wealth might be alarmingly impaired by the grant of the State's credit. *Railroads which do not pay are injurious to the public weal.* If capital, whether furnished by the State or individuals be buried without hope of return, the public wealth is lessened by the sum of that capital. Other interests, agricultural, mechanical, miscellaneous, have so much of the public means abstracted from them, and thus double injury is inflicted on the people. Railroads which do not pay, will never be

kept in order, and can not for any length of time, be kept at all by the original owners. They may be sold under execution, and thus come into the hands of new owners at so low a figure as to be revived, and be remunerating. But in such case the capital of the projectors is gone forever, and its flight can be traced by the tears of ruined families.

There is something exciting in the idea of competition—of rivalry. In no department of the busy world is this excitement stronger than in the matter of transporting men and goods by means of railroads. In many States experience has shown what evils spring from too great encouragement of fierce competition. The general blessings conferred by well conducted railroads are seen, felt and acknowledged on every hand, and yet the road to ruin may be as sure by the iron rail as by any other of the thousand ways leading in that direction. Is it not enough to leave the means of such competition and excitement, to those who desire to promote them? Why should any State be embarked in the strife? A general State aid bill would invite and encourage this rivalry and excitement to the irreparable injury of thousands of her people—of that portion of her people, too, who by their enterprise and their private pecuniary means first brought to the State her glory, and honor, and power. Is there nothing due from the State to that people? Is there, in the whirl of modern progress, no space in which they can be seen even for a moment?

THE TERRE HAUTE AND RICHMOND R. R.

The president, in his report, remarks that the business of the road has been as large as could have been expected; and that it has been less affected by the many influences which have been adverse to the general railroad interests.

And while the road exhibits decreased receipts, it also shows a corresponding reduction of expenses, and a profitable business, enabling the board to declare from the earnings of the Road for the year, a dividend of ten per cent. The gross receipts for the year are three hundred and eighty thousand two hundred and seventy-four dollars and sixty cents. And the expenditures for operating and repairs, one hundred and ninety three thousand eight hundred and twenty-five dollars and seventy-four cents, eighteen thousand six hundred and ninety-seven dollars and eighty-one cents of which has been for the re-construction of bridges, culverts, etc. Taxes and interest paid, amount to twenty-five thousand three hundred and four dollars and thirty-two cents. The road, machinery and equipments, of every description are in better condition than at any former period.

The masonry of the bridges have been completed. And nearly the whole line of Road aid with new ties and fresh ballasted; and

we are warranted in saying that the Road, for permanence of way and durability of structure, will compare favorable with other first class roads.

"One hundred and twenty-nine thousand four hundred and twenty-three passengers have passed over the road during the year, without the slightest injury to any one. Nor has any accident, worthy of note, occurred to any employee in the service of the Company.

"The season through which we have passed, has been remarkable for continued rains, freshets, and high winds, yet not a bridge or culvert has been injured or a train delayed. Before closing this report, we can but state our disapprobation of the low rates at which the through business of Railroads has been done during the season that has closed, which has, more than any other cause, diminished the receipts of railroads generally."

SECRETARY'S REPORT.

The earnings of the Company for the transportation of passengers, freight, etc., for the year ending November 30, 1858, were as follows:

RECEIPTS.	
For transportation of Passengers.....	\$189,008 59
" " Extra Baggage.....	125 61
" " Express.....	9,873 61
" " Freight.....	164,614 53
" " Coal.....	8,490 00
" " U. S. Mail.....	6,023 34
" Mileage, Cars.....	989 92
Gross Earnings.....	\$380,274 60
EXPENDITURES.	
Train Expenses.....	\$31,409 09
Oil, waste and tallow.....	3,272 14
Fuel.....	19,110 44
Water Rent.....	7 00
Repairs of Road.....	\$44,066 80
" of water st'ns.....	1,224 73
" Buildings.....	1,978 59
Repairs of Machinery, Engines and Cars.....	52,604 58
Depot Expenses.....	15,044 92
Loss and damage.....	1,600 56
Stock Killed.....	422 45
Salaries of officers.....	5,300 00
Repairs of fences.....	3,949 60
Mail expenses.....	269 50
Rent.....	185 00
Foreign Agencies.....	2,003 87
Incidental.....	2,689 66
	121,329 26
Operating expenses.....	\$175,127 93
ADDITIONAL EXPENDITURES.	
Rebuilding bridges and culverts.....	\$15,890 07
Equipment.....	405 00
Extension Depot at In- dianapolis.....	715 95
New Boiler Shop.....	931 19
Legal Expenses.....	755 60
	\$18,697 81
Net earnings.....	\$165,448 86
ACCOUNT WITH THE STOCKHOLDERS.	
To taxes.....	\$7,252 28
" Interest.....	18,052 04
" June Dividend.....	68,822 50
" December Dividend.....	68,822 50
" Balance.....	166,187 34
Total.....	\$329,136 66
1857.	
Nov. 30. By balance Nov. 30, 1857.....	\$142,312 91
1858.	
Nov. 30. By profit on work done in Machine Shop for other Roads.....	374 89
" By net earnings for the year ending Nov. 30, 1858.....	186,458 86
	\$329,136 66
1858.	
Nov. 30. By balance, brought down.....	\$166,187 34

BALANCE OF LEDGER.

	Dr.
Construction.....	\$1,585,809 22
Union Depot and Track, Ind.,.....	25,610 78
	\$1,611,450 00
Evansville and Crawfordsville Railroad Stock.....	24,429 40
Atlantic and Mississippi R. R.....	245 00
M. and Indianapolis R. R. Income Bonds.....	1,600 00
Real Estate for Wood.....	2,601 10
Material.....	33,509 77
Fuel.....	18,000 00
Railroad Iron.....	5,416 00
Due for U. S. Mails.....	4,802 00
Bills Receivable:	
Terre Haute and Alton R. R.....	\$63,559 82
Sundries.....	2,728 24
	66,588 06
Treasurer.....	79,194 07
Total.....	\$1,846,989 98
Cr.	
Capital Stock.....	\$1,376,450 00
Bonds 7 per cent.....	235,400 00
Dividends Unpaid.....	610 14
Dividend Declared.....	68,822 50
Surplus Account.....	166,187 34
Total.....	\$1,846,989 98

OFFICERS AND DIRECTORS FOR 1858.

E. J. Peck, *President and Superintendent*;
Charles Wood, *Secretary*; John Scott, *Treasurer*.

Chauncey Rose, James Farrington, Demas
Deming, W. H. Thornburgh, E. J. Peck, A.
M'Gregor, H. Ross, Chas. Wood, William K.
Edwards, *Directors*.

MESSAGE OF THE GOV. OF PENNSYLVANIA.

Below we give a few extracts from the Message of Gov. Packer, of Pennsylvania, showing the financial condition of the State, and the disposition of the public works:

Although the year just closed has been one of great depression in the business and monetary affairs of the country, I am happy to be able to announce to the Representatives of the people, that the finances of Pennsylvania are in a most satisfactory condition.

The receipts of the Treasury, from all sources for the fiscal year, ending on the 30th day of November, 1858, were \$4,139,778 35; and the expenditures, for all purposes, during the same time, were \$3,775,857 09. Leaving an excess of receipts over expenditures of \$363,921 29.

This exhibit shows that there was actually in the Treasury on the first day of December, 1858, the sum of \$363,921 29, more than there was on the 1st day of December, 1857. In addition to this, among the expenditures for the year were:

Loans redeemed.....	\$280,306 85
Relief Notes redeemed.....	41,071 00
Interest Certificates.....	116 70

Making of the public debt funded and unfunded paid during the year the sum of \$421,494 55. If we add to this the excess of money on hand, at the end of the fiscal year, over what remained in the treasury, at the same time last year, viz: 363,921 29

We have the sum of.....\$785,415 84

But this is not all. The amount paid on the public improvements, including damages and old claims, during the fiscal year, was.....\$341,036 58. While the amount of revenue, from the same source, for the same period, was only.....95,070 06

Making an excess of expenditures over receipts, which happily we will be relieved from in the future, of.....\$245,966 52

This sum should, also, be credited to the operation of the Treasury, during the year, for it was an extraordinary expenditure, which cannot again occur; and was, in fact, a reduction of the liabilities of the Commonwealth to that extent.

If we add this sum to the amount of debt paid, and the excess of cash on hand, we have for the year a balance in favor of the receipts, over the ordinary expenditures, amounting in the aggregate to \$1,031,382 36.

But from this, however, should be deducted the extraordinary receipts, which were—

1st. The amount paid by the Pennsylvania Railroad Company, on the principal of the debt due by the said company, to the Commonwealth, for the purchase of the Main Line.....	\$100,000 00
2d. The amount received from the Girard Bank, for loans of the Commonwealth sold by that Bank.....	28,600 10

In all.....\$128,600 00

Which, deducted from the foregoing aggregate of \$1,031,382 36, leaves the true balance of the ordinary receipts over the ordinary expenditures for the fiscal year at \$903,382 36.

The funded and unfunded debt of the Commonwealth on the 1st day of December, 1857, was as follows:

FUNDED DEBT.

6 per cent. loan.....	\$445,150 00
5 per cent. loan.....	38,773,212 52
4 1/2 per cent. loan.....	38,250 00
4 per cent. loan.....	100,000 00
To this should be added 5 per cent. Coupon Bonds sold by Girard Bank, not before reported.....	28,000 00

The funded debt.....\$39,734,592 52

UNFUNDED DEBT.

Relief Notes outstanding.....	\$146,421 00
Interest certificates do.,.....	23,473 82
Do. do. unclaimed.....	4,442 38
Domestic creditors.....	812 50

Total unfunded debt.....\$175,145 70

Making the entire debt of the Commonwealth at the period named, \$39,909,738 22.

The funded and unfunded debt of the State at the close of the last fiscal year, December 1, 1858, stood as follows:

FUNDED DEBT.

6 per cent. loans.....	\$445,180 00
5 per cent. loans.....	38,430,905 67
4 1/2 per cent. loans.....	388,200 00
4 per cent. loans.....	100,000 00

Total funded debt.....\$39,354,285 67

UNFUNDED DEBT.

Relief Notes outstanding.....	\$105,350 00
Interest certificates.....	23,357 12
Do. do. unclaimed.....	4,442 38
Domestic creditors.....	812 50

Total unfunded debt.....\$133,958 00

Making the public debt on the first of December last, \$39,488,243 67. Since the close of the fiscal year, the Commissioners of the Sinking Fund have redeemed of the five per cent. loan, the sum of \$220,132 51, leaving the real debt of the Commonwealth, at this time, funded and unfunded, \$39,268,111 16.

To meet this, besides the ordinary sources of public revenue, the State owns bonds received from the sale of public works, and which I have every reason to believe, are well secured, amounting to eleven millions one hundred and eighty-one dollars. Deducting this from the outstanding debt, leaves to be otherwise provided for, the sum of twenty-eight millions eighty-seven thousand one hundred and eleven dollars and sixteen cents.

In pursuance of the act entitled "An Act for the sale of the State Canals," approved on the 21st day of April last, I did, as the Governor of the Commonwealth, on the 19th day of May, 1858, convey to the Sanbury and Erie Railroad Company, all the public works belonging to the Commonwealth, then remaining unsold, consisting of the Delaware Division—the Upper and Lower North Branch Divisions—the West Branch Division

—and the Susquehanna Division of the Pennsylvania Canal, with all the property thereunto belonging, or in anywise appertaining, and all the estate, right, title and interest of the Commonwealth therein, for the sum of three millions five hundred thousand dollars. To secure the payment of this sum, the Sunbury and Erie Railroad Company paid to the State Treasurer its bonds, secured by a mortgage, as directed by the act, for the amount of the purchase money. The company, also, complied with the provisions of the act which required it, as additional security, to execute and deliver to the State Treasurer a mortgage on the Delaware Division for one million—a mortgage on the Susquehanna and West Branch Divisions for half a million—and a mortgage on the Upper and Lower North Branch Divisions for half a million of dollars. The deeds and mortgages were all executed under the immediate supervision of the Attorney General, and were in strict conformity with the requirements of the law.

After the conveyances were duly executed and delivered, possession of the canals were given to the railroad company.

The act further provided that the Sunbury & Erie Railroad Company should not re-sell the Canals, or any part of them, without the consent of the Governor; and that if a re-sale were made for a greater sum, in the aggregate than three and a half millions of dollars, seventy-five per centum of the excess should be paid to the Commonwealth, in the bonds of the purchasers. It was also provided that upon a re-sale, the mortgages given by the Sunbury and Erie Railroad Company to the Commonwealth, upon the Canals, "should be cancelled by the State Treasurer and surrendered to the Company by the Governor, on deposit made by the said Company in the office of the State Treasurer, of an equal amount of the bonds of their grantees, secured by the mortgage of the canal or canals sold as aforesaid"—with a provision that no transfer of securities should be made until the Governor should be satisfied that the new securities to be given were sufficient to protect the interests of the State; and that his written approval of the change should be filed in the office of the Secretary of the Commonwealth.

Sales were made by the Sunbury and Erie Railroad Company, and reported to me under oath of the President, of the different lines, as follows:

The Upper and Lower North Branch Canal, to the North Branch Canal Company, for.....	\$1,600,000
The West Branch and Susquehanna Divisions to the West Branch and Susquehanna Canal Company, for.....	500,000
The Delaware Division, to the Delaware Division Canal Company, of Pennsylvania, for.....	1,775,000
In all the sum of.....	\$3,875,000

Upon investigation and inquiry, having become satisfied that these sales were made for fair prices, and upon such terms, and to such persons composing the various purchasing associations, as to insure the payment of the purchase money, they were severally approved.

After the contract for the sale of the Delaware Division had been entered into, and my consent had been verbally given, and seventy-five thousand dollars of the purchase money had been actually paid by the purchasers, I was informed that a higher price had been offered, by responsible persons for the canal. But, under the circumstances, my opinion was that the offer came too late; and as the Rail-

road Company considered itself bound to consummate the agreement by a delivery of the deed and possession of the property to the first purchasers, I could not, in good faith, withhold my consent. The North Branch Canal Company, subsequent to the purchase of that division, sold that portion of the canal lying between Wilkesbarre and Northumberland to the Wyoming Canal Company, for the sum of nine hundred and eighty five thousand dollars.

On the 13th of September, 1858, bonds of the various companies owning the different canals, secured by mortgages, were, in pursuance of the act, and by my approval, deposited with the State Treasurer, to the amount of two millions of dollars; and the mortgages on the canals given by the Sunbury and Erie Railroad, were cancelled by the State Treasurer, and surrendered by me to the company, in accordance with the directions of the law. At the same time a settlement was made between the Commonwealth and the Railroad Company, by which the latter paid to the State seventy-five per centum of the proceeds of the re-sale over and above the contract price of three and a half millions. This amounted to two hundred and eighty-one thousand two hundred and fifty dollars, and was paid in the following manner, viz:

Bonds of the Wyoming Canal Company, secured by Mortgage on the Canal from Wilkesbarre to Northumberland, payable in twenty years with interest at six per cent. payable semi annually.....	\$281,000 00
Cash.....	250 00
Total.....	\$281,250 00

These bonds are well secured, and the accruing interest and principal, when due, will doubtless promptly be paid.

From information of a reliable character recently communicated to me by the President of the Sunbury and Erie Railroad Company, it appears that the prospects of an early completion of that great public highway are very encouraging. A large amount of work has been done on the line of the road during the past season, and at this time, very considerable portions of the road are graded and rapidly approaching completion. It is the opinion of the President of the company that within two years, the work will be entirely finished, so that cars will be running directly from the city of Philadelphia to the harbor of Erie.

When this great enterprise shall be consummated, and the desire of its friends finally accomplished, the payment of the three millions and a half of mortgage bonds, which the State has received in exchange for the canals will unquestionably be well secured—whilst the railroad, itself, will prove of incalculable advantage to our great commercial emporium as well as to the important but long neglected region through which it passes. Its construction will undoubtedly add to the value of the real estate of the Commonwealth many times its cost, and develop and bring into use the rich resources of a country which have hitherto remained as they were lavishly strown by the hand of nature. I have an abiding confidence that the result will abundantly prove the wisdom of the measure, which, while it guaranteed the completion of one of the greatest improvements ever projected in the Commonwealth, it, at the same time, divorced the State from the unprofitable and demoralizing management of her railroads and canals.

Whatever differences of opinion may at any time have been entertained with regard to

the propriety of the details of the legislature authorizing the sale of the main line, or the branches, it can scarcely be doubted that the public welfare will, in every respect, be vastly promoted by the transfer of the management of the public works from the State to individual owners.

The short experience that we have had already, proves conclusively that the Commonwealth is greatly the gainer, in a financial point of view, and it has been equally demonstrated that the people at large have been as well, if not better, accommodated by the change.

It would, in my judgment, be a public calamity, if, by the happening of any contingency, the Commonwealth should be constrained to again become the owner, and resume the management of any portion of the public improvement.

LAND GRANTS TO RAILROADS.

The following information is valuable to those interested in Railroads, and we shall hereafter make some comments, on the practical results of these grants.

The Report of the Commissioner of the U. S. Land Office gives the following statement, showing the amount of land granted to railroads under recent acts of Congress:

Iowa.—The grant to this State by act of May 15, 1856, is for four roads, parallel to each other, traversing the State from east to west, connecting important points on the Mississippi with the Missouri river. The grant had been accepted by the State, and transferred to companies, the lines of route established, their six and fifteen mile lateral limits laid down on the official plats, and lists of land have been prepared.

The following is an exhibit of the length of each road under the grant, and the areas ascertained for each, exclusive of suspended interferences:

	Miles.	Acres.
Dubuque and Pacific Railroad.....	339½	1,137,143
Iowa Central Air Line Railroad.....	438	686,523
Mississippi and Missouri Railroad.....	318	400,000
Burlington and Missouri Railroad.....	276½	252,055
Total.....	1,263	2,476,321

Alabama.—The grant to this State is for eleven roads and one branch, as follows:

By the act of 17th May, 1856, for one road; 3d June, 1856, for eight; 11th August, 1856, for one; and 3d March, 1857, for one road and branch. The Land Office have thus far acted upon the acceptance by the State of the grant for three roads and her rejection of one, viz: that for the Memphis and Charleston. Of the three roads referred to, one is under the act of 17th May, 1856, and two under act of 3d June, 1856. The adjustment of two of them has been nearly completed. The lengths of these roads and quantities inuring to them respectively are as follows:

	Miles.	Acres.
Alabama and Florida Railroad.....	114	398,500
Mobile and Girard Railroad.....	228½	500,000
Alabama and Tennessee Railroad.....	125½	250,000
Total.....	468	1,148,500

In addition to these, a map of the Coosa and Chattoogee River Railroad has been presented, but no definite action has been had thereon.

Florida.—The aforesaid act of 17th May, 1856, also makes a grant to Florida. The maps for all of the roads have been filed, except for a portion of the line of road to Tampa Bay; and the following is the length of the recognized roads and quantities of land inuring:

	Miles.	Acres.
Florida & Alabama Railroad, approved and duly certified to the State.....	45	165,687
Florida, Alabama, and Gulf Central R. R. 60	60	27,778
Pensacola and Georgia Railroad.....	290½	901,000
Florida Railroad Company.....	151½	4280,000
Total.....	547½	1,374,465

* Nearly completed.

† Estimated.

Louisiana.—By the act of June, 1856, lands were granted to this State for three roads, and by the act of 11th August, 1856, for one road.

Two of the three first mentioned have been accepted, all the official preliminary requirements have been complied with, and the adjustment thereof has so far progressed that the lists are nearly completed for approval.

The grant for the remaining road has been rejected by the State, and the withdrawn lands restored to market.

The length of recognized roads and quantities inuring to them respectively, are as follows:

	Miles.	Acres.
New Orleans, Opelousas, and Great Western.....	263	684,000
Vicksburg, Shreveport and Texas.....	146	363,670
	423	1,047,670

Wisconsin.—By the act of 3d June, 1856, a grant was made to this State for two lines of road, one being a branch. The routes and lateral limits have been laid down on the official plats, but as the lists have not been prepared for the selections, the following is submitted as an estimate merely of the probable quantities:

	Miles.	Acres.
La Crosse and Milwaukee Railroad.....	252	725,000
St. Croix and Lake Superior Railroad.....	243	960,000
Chicago, St. Paul and Fond du Lac R.R. extending into Michigan, that part being treated of under that head.....	167	606,000
	662	12,225,000

Michigan.—The act of 3d June, 1856, makes a grant to this State for eight routes, (roads and branches.) The maps for the roads in the northern peninsula have been filed; that of but one, (the Chicago, St. Paul, Fond du Lac) has been definitely acted upon and accepted, the adjustment of the grant being now in progress. Maps of all the lines in the lower peninsula, excepting the Amboy, Hillsdale, Lansing and Traverse Bay Road, have been filed and laid down on the official plats. The lists not having yet been prepared, the following are only estimates:

	Miles.	Acres.
Michigan part of the Chicago, St. Paul and Fond du Lac Railroad.....	150	575,000
Grand Rapids and Indiana Railroad...	183	660,000
Detroit and Milwaukee.....	107	35,000
Point Huron and Milwaukee.....	89½	15,000
Flint and Pere Marquette.....	183½	625,000
	712½	1,910,000

Mississippi.—The act of 11th August, 1856, makes a grant to the State of Mississippi, of lands for four railroads, only one of which has been reported, namely, the route from Jackson eastward to the Alabama line, which, by an act of the State has passed to the Southern Railroad Company. The map has been filed and accepted, the lateral limits of the road laid down on the official plats, and a list of the lands inuring to the State under the grant is nearly ready for approval. The length of the road is one hundred and ten miles; area of lands inuring to the road is two hundred and seven thousand, seven hundred and thirty-one acres, exclusive of conflicts, which, when adjusted, may increase the quantity.

Minnesota.—The grant by the act of 3d March, 1857, makes provision in land, to aid in the construction of four roads and two branches in Minnesota. The grant has been accepted. The route of one road and its branch, and part of another and its branch, are in progress of being laid down, with their lateral limits, upon the official township plats. When this is accomplished, the work of adjustment will go on. In the meantime, the following estimates are submitted:

1 The estimate in last report was upon direct lines between the termini. The present statement in this case rests upon the returns of actual survey, giving directions to the routes necessary in consequence of difficulties encountered in the configuration of the country, and thereby increasing the length of the roads and quantity inuring.

	Miles.	Acres.
Minnesota & Pacific R. R., (main stem)	230	550,000
Minnesota & Pacific R. R., (branch)	116	400,000
Minneapolis & Cedar Valley R.R. (branch)	112	150,000
	458	1,400,000

The map of the Southern Minnesota Railroad and the Transit Railroad, being incomplete, and not finally acted upon, are excluded from this estimate.

The following summary indicates the length only, of such of the railroads as are in progress of adjustment under the legislation hereinbefore cited with the quantities of land, part estimated, inuring to the same:

States.	Miles.	Acres.
Iowa.....	1,863	2,476,321
Alabama.....	468	1,141,297
Florida.....	547½	1,374,365
Louisiana.....	429	1,047,670
Wisconsin.....	662	2,225,000
Michigan.....	712½	1,910,000
Mississippi.....	110	269,731
Minnesota.....	458	1,400,000
	4,649½	11,775,484

PACIFIC RAILROAD IN CONGRESS.

SENATE. Jan. 6.—Mr. Bigler took the floor to speak in favor of the bill, which was interrupted yesterday by the announcement from the House of the decease of General Quitman.

Mr. Bigler was happy to discover in the many speeches on this subject, that but little diversity of opinion exists as to the necessity of the construction of a railroad across the public domain to the Pacific Ocean. The main difference in the Senate and the country, is as to the proper means to accomplish the desired end and as to its proper location. For himself, he would not be tenacious on minor points; his object was to secure the construction of the road, not so much as a means of developing the material wealth of the intermediate country as of maintaining our rights and protecting our citizens on the Pacific side. The whereabouts of the road is an object of secondary importance; whether it be a few degrees further north or south, so that it be a great national highway, no one will contend that it should be forced where nature never intended it to be. He himself preferred a central route. He could see no reason for a serious difference about either terminus of the road; the main track through the mountains is the main consideration. In locating this, due consideration should be had to the cost of the work, the height of the grades and the character of the curvatures, but, above all, to the nature of the climate and the depth of snows.

Mr. Bigler made a digression to notice the progress of all railroad enterprise in the United States, showing its effect on the trade, commerce, wealth, political growth and strength of the Union, illustrating his statement by the fact that many weeks elapsed before the Declaration of Independence was known to all parts of the infant republic, and as late as 1814 it was long before all the States knew that the Capitol was laid in ashes; yet now, whatever transpires in any one State is known promptly in all, except in one on the Pacific. Were any one State assailed to-day by a foreign foe, the fact would be known to all the others on to-morrow, and the whole military power of the Republic could be concentrated for its defence. Meantime the belt of barren country between the Mississippi and the Pacific has arrested the westward progress of railroads, and the task of overcoming this obstacle is evidently too great for individual means, over an inhospitable country, ill-adapted for agriculture, however rich it may be in minerals; therefore, if

it is left to mere commercial considerations it is not likely to be constructed in time for the necessity of the Government, considering, as he did, that it is of a far more military and political measure than of immediate commercial wealth. He asked why the Government should not lend its aid, its countenance, and its credit. He was averse to committing the Government in any way, but he considered that individual capital is not equal to the task, and hence that the strong arm of Government should be extended to the work, especially as much of the country through which it should pass is ineligible for immediate settlement. Its completion as a precautionary measure of defence would be a wise and sagacious policy. Viewed strictly as a military measure, it is worthy of the best efforts of the Government; for were war to break out with a great maritime power, without this means of concentrating our forces, California, in all probability, would be cut off from all communication with the Atlantic States. He could see little difference between the construction of such a work and of works to defend the commercial cities of the seaboard.

Why not prepare in time of peace for contingencies which must inevitably rise in case of war.

Some may be ready to conclude that we shall have no war. He trusted in God not.

War is always a calamity, but not such a calamity as insult and degradation. It would be idle to say that we are not involved in an imbroglio now in regard to Central America, Mexico and Spain, from which such a calamity may be ready to spring.

It would be singular if the first six months of such a war did not cost more than would the construction of such a road. Will any man say that we are in a condition to defend our Pacific possessions?

Then how can we talk about the acquisition of additional possessions, about a war for Cuba, and a protectorate over Mexico.

Let us establish this protectorate over ourselves, and we shall then be in a better position to influence the destinies of others. Probably there was no Senator, himself included, but would vote three or four hundred millions for the purchase of Cuba, yet they would not vote a grant of public lands for the preservation of California, Oregon and Washington. What power would be strong enough to meet us on the Pacific with such a railroad, or weak enough not to annoy us without? As a channel of commerce it would open the direct route from China and Japan. It would be a route, not for heavy tonnage, certainly, but for the precious metals, for the finer fabrics, and for the mails reciprocally from the East to the West. Great Britain is watchful to forestall those advantages, and it is now as certain that a railroad is practicable through the British valleys of the Red River of the North and Frazer River.

Finally, Mr. Bigler disposed of the various objections urged against the road, and concluded by warning the Government not to be penny wise and pound foolish, but to bind together this confederacy of sovereign States for their mutual aid and protection. No statesman need fear the efforts of such a precedent.

Mr. Harlan, of Iowa, spoke forcibly on the propriety of Congress locating the route. The capital required is \$100,000,000, nearly one-third of the surplus capital of the country.

There are but few individuals or companies in our country who can contract so much

money, and hence it is sure to be a monopoly and, perhaps, a foreign one. What security is there, too, that the contractors, having secured the eight millions of cash and ten millions of acres of the best lands for constructing the road through a fertile district, will advance one step across the precipitous mountains and sterile plains of the interior? Topographically there is but little difference between the central route and the one surveyed. Either can be built in ten or twelve years without deranging the financial condition of the country. He was, therefore, in favor of the central route as being the most thickly populated.

Mr. Harlan was severe on the members of Congress, who, after having spent half a million of dollars in explorations, the results of which had been published in immense quarto reports, illustrated with pictures for those who can not read, now want to shift upon the mail contractors the responsibilities of locating the road, lest they should offend their constituents by not securing it for their particular locality.

Mr. Ward, of Texas, spoke in favor of locating the road on the thirty-second parallel, comparing its advantages of level and distance over the Central and Northern routes, and maintaining that the Southern road can be built with the smallest amount of money and in the shortest time.

Mr. Iverson made a strong sectional speech. He moved that the bill be recommitted, with instructions to report a bill for the construction of two roads—one Northern and one Southern. He admitted the constitutional power of Congress to grant public lands, but was astonished that Southern Senators should vote such a magnificent donation to the North.

It is a known fact that all Southern railroads pay seven and eight per cent. dividend, while the Northern roads pay nothing.

So small is the opinion held by Northern capitalists of Southern investments that he believed if the wealthy Senator from South Carolina (Hammond) offered to mortgage his plantation of negroes, worth half a million of dollars, for a loan of ten thousand dollars in New York, he could not get it, notwithstanding the popularity of his Barnwell speech.

JAN. 7.—The Pacific Railroad Bill was taken up.

Mr. Shields, of Minnesota, spoke in favor of the Northern route to Puget's Sound, setting forth its advantages over all others.

Mr. Doolittle of Wisconsin, moved an amendment, providing that a board of three engineers be appointed to survey each of the proposed routes, the Northern, Central and Southern, and report the capabilities and estimate of the expense of each to the President before the next meeting of Congress.

A new feature in his amendment is, that it also provides that the alternate sections of land along the route shall be open under the homestead law to actual settlers.

Without taking action on the bill, on motion of Mr. Slidell, the Senate adjourned over till Monday in commemoration of the battle of New Orleans.

Mr. Iverson, of Georgia, advocates the building of two Pacific Railroads, one for the North and one from the South, so that when the sections are separated, each may have its own road.

THE PACIFIC RAILROAD SENATE BILLS.

Various projects are now pending before the Senate proposing to make provision for the construction of a railroad from the Mississippi valley to the Pacific. We shall embrace an early occasion to lay the several provisions of those various measures before the public. We propose to condense for our readers the leading features of this mammoth measure, and to epitomize the argument by which it is supported. At present we shall confine our exposition of the scheme which has been submitted to the Senate by the Special Committee raised by that body on the subject, of which Mr. Gwin, of California, is Chairman.

The title of this bill is:—"To authorize the President of the United States to contract for the transportation of the mails, troops, seamen, munitions of war, army and navy supplies, and all other government service, by railroad from the Missouri river to San Francisco, in the State of California." It is contended that Congress possesses the constitutional power to make contracts for the transportation of the above enumerated objects of the railroad. To enable the contractor to prepare a road over which to perform this transportation, it is proposed that Congress shall make certain advances. The first is a bonus of twenty sections of land to the mile on the road. In case the land is sold, then, an equal quantity within forty miles of the road. The mineral lands of California are also excepted from selection; and an equivalent given elsewhere.

The road is to be divided into sections of twenty-five miles, and no land is to be conveyed until one section is completed, when three-fourths of the land pertaining to that section is to be conveyed, and the other fourth to be reserved by the government as security for the completion of the remainder.

1. As soon as one section of 25 miles is completed, the President is required to issue bonds of the United States, bearing interest at the rate of 5 per cent. to the amount of twelve thousand five hundred dollars per mile; but the amount so issued shall not exceed twenty-five millions of dollars. Therefore, before the contractors get any land or money, they must construct and put in operation 25 miles of the road and another 25 miles before they receive any more, and so on with each section of the road. In addition to which, they are required to deposit as security \$500,000 in United States stocks, which can be withdrawn *pro rata* as the road progresses. Before the contractor can get either land or money, he must spend over a million of dollars in making a section of the road 25 miles long, and so with each section before payment. Thus there is no probability of loss on the part of the government.

2. The money thus advanced by the bonds of the government, and interest is to be refunded to the government in transportation, at the ordinary rates, and mail service not exceeding the rate of \$500 per mile. Thus, as to the money it is to be a loan. And as to the lands the government is to be reimbursed by the increased value and settlement of its remaining public lands in the vicinity of the road. It is claimed, that this is not a donation of either land or money, because the money is all to be refunded; and, as to the land, it is only such a disposition as any wise proprietor would make of a part to render what was retained fourfold more valuable than the whole without the road.

3. The lettings are to be advertised, and

the contracts to be given to the lowest bidder by the President.

4. The road is to be completed in ten years.

5. After the expiration of the contract, "said transportation—postal, military, naval, and for every other government purpose—shall be performed on said road, under the direction of the proper departments, for reasonable prices, not exceeding those paid on other first class railroads, to be ascertained by Congress, in the event of a disagreement between the government and the contractors or owners of said road.

6. The bill contemplates that, after a certain period, the road shall be surrendered to the States through which it passes.

7. In case the contractor fails to comply, or violates his contract, then he forfeits all he has done, and his deposits, and the President has a right to re-let the work.

8. The contractors are required to sell one-half the lands they receive within five years from the date of their patents, and all remaining unsold at the end of ten years is forfeited to the United States. This provision is designed to effectually prevent any land monopoly.

9. Two hundred feet are set apart along the road for a highway and telegraph.

These are the main features of the bill. there are many regulations in detail securing the rights of the government and public. It has been prepared by the committee with much labor and care.

10. The contractors within the points named have the power to locate the road. It was supposed that capital would seek the best location, as the public interests and that of the contractors must be necessarily to adopt the most remunerative route. It is one of those cases where the interest of the public and the interests of the capitalists are identical, and in those cases it is always safest to trust to capital for a wise and sound course of policy.

On any of the routes proposed or likely to be adopted the advances of government in bonds and interest, allowing ten years for the construction of the railroads, would not exceed three millions of dollars per annum. It is contended that that amount can be spared from the treasury without giving the slightest inconvenience to the treasury, or in any way adding perceptibly to the taxation of the country. These bonds have nineteen years to run, and before they fall due it is claimed that it will be refunded in transportation, and a vast amount saved to the government in the reduced rates of mail service and other government transportation. So that, in fact, the road is a measure of economy, and will decrease the rate of taxation and the burdens of the people.

11. It is argued with great confidence and force that the road would pay; and that it will pay in sections, before it is finished through to the Pacific. It will pass over a region where there is even now a large travel. The overland mail coaches can not even now accommodate one hundredth part of it on any of the routes. On all of the routes proposed for the railroad, there is a large intermediate country fit for settlement, and which will yield a heavy product for export. As there is no navigation, all this would come on the railroad. It is known that many portions of the country abound in minerals, which would be transported on the road.

All the treasures from the Pacific would be transported on the road to avoid insurance

and perils of the sea. The operations of the roads in Mississippi, and along the Ohio, and in the West generally, show that they are much better adapted to the transportation of heavy freight than was formerly believed. They are actually superseding river navigation in the transportation of all freights.

If there were a railroad to the Pacific, it would carry nearly all the merchandize that now goes round the Horn. The reason is obvious. It would require much less capital to do business, as the merchant could order and receive his supplies in ten days by railroad. It would, therefore, not be required to keep such heavy stocks as at present. Now he is compelled to pay interest on a six months voyage, which the railroad would obviate.

It is also claimed that the silks and teas of China would go on the railroad to avoid damages in the tropics and the delays of a long voyage. To avoid the same delay and loss of capital, a large portion of the sperm oil that is now carried by sea would be transported on the road. All the products of the vine, now becoming large in California and New Mexico, would be transported on the road. The magnificent grapes, oranges, limes, figs, and olives of Los Angeles would be marketed in New York and the intermediate cities. The agricultural products of the far West would be poured into the lap of the East. The housewife of the Atlantic cities would see every morning upon her table beef and mutton from the great grama plains of the Rio Grande.

It is urged that an overland railroad would control and throw into new channels the trade of the East, which no nation has ever possessed without making rapid progress in commerce and wealth. The tropics are unfriendly to the transportation of the products of China. No isthmus route can ever compete with a railroad from San Francisco or Puget Sound to the Atlantic. Such a road is destined to control this trade. If it is not speedily commenced by our government on the soil of the United States, it will be constructed on English ground by the British government. With such a road, and her present foothold in the East, she would drive our ships from the Chinese ports and monopolize the trade. And while she would have a railroad to threaten and control our possessions on the Pacific, we should have no means of succor or defence. This subject will not brook further delay, in view of the urgent and mighty national interests which hang on the Pacific railroad.

MEXICO.

A memorial upon the population, resources, finances and other statistics of the Republic of Mexico, was lately drawn up by M. Lerdo de Tejada, a Mexican statesman of much distinction, and at this time probably more esteemed for liberal and enlightened views than any other of the prominent men in Mexico. Mr. Lerdo has taken a very leading part in the political reforms of his own country, and is the author of the law which is so obnoxious to the anti-liberals, for the secularizing of the church property.

We condense some of the leading facts which are of most interest.

The number of Mexican States is twenty-two, in addition to which there are the District of Mexico and five Territories.

The estimated population is 7,859,564. The extent of territory is set down at 140,317 square leagues. The average density of the

population is, therefore, about 56 to the square league. The central and southern Pacific States are most populous; along the frontier of the United States the population is sparse. The following table gives the aggregate numbers—and the number per square league—for the States bordering on the United States, beginning on the western end of the common boundary:

	Square Leagues.	Population.	Average per League.
Sonora.....	13,940	147,133	11
Chihuahua.....	14,615	147,600	13
New Leon.....	2,321	141,816	43
Tamaulipas.....	4,219	168,514	26

In Sonora and Chihuahua, which are occupied mainly by roving bands of hostile Indians, who make excursions into the United States and ravage our frontier, the average population does not exceed a dozen to a square league, and even this population does not hold on the sterile lands which are adjacent to the frontier.

The largest city in Mexico is the city of Mexico, which has 185,000 inhabitants. Puebla is the next, with 70,000. Next follow in order Guadalajara, 68,000; Aguas Calientes, 39,099; Guanajuato, 36,921; Colima, 31,774; Queretaro, 27,456; Oaja, 25,000; Merida, 23,575; Morelia, 22,000. No other city reaches 20,000 in number. The aggregate population of all the capitals of all the States and Territories is 690,044. The increase of population in all Mexico since 1817 is estimated at about 2,000,000. The number of foreigners who took out permits for residence, or letters of security, from the Ministry of Foreign Affairs, during the year 1855, was 9,234, of whom 5,141 were old Spaniards, 2,048 French, 615 English, 581 Germans, 444 Americans, and 408 others.

The amount of land which has been put under cultivation is small, not one-eighth part of the arable soil.

The yield of agriculture, which was estimated in 1817 at \$139,000,000, is now put by M. Lerdo at \$260,000,000.

The estimated product of the gold and silver mines in Mexico, on the basis of the returns of coinage in 1855, is \$24,000,000 per annum—more than two-thirds of which was of silver.

The annual value of manufactured articles is set down at \$90,000,000. Wine and brandy are made in Chihuahua. In the Middle States there are forty-six manufactories of cotton, and eight of woollens, and there are silk manufactories in Puebla and Guadalajara.

Lerdo estimates the annual commercial movement of the country at about \$400,000,000, and the specie at about \$100,000,000.

The foreign exports, a few years ago, were \$26,000,000, and the imports \$28,000,000—a very small amount for so fertile a region; but capable of great expansion, under a better system and in quiet times.

The imports were from foreign countries in the following proportions; Great Britain nearly one-half, France and the United States about one-fifth each; the remainder were from Germany, Spain, the East Indies, Belgium, and the neighboring States of Central America.

In 1854, the number of vessels from foreign countries employed in this trade, including vessels which carried only passengers, letters and specie, was 484, having a tonnage of 191,723.

In 1854, the public debt was \$117,000,000. The national revenue was \$15,000,000 per

annum, and the annual expenditure \$24,819,203, leaving an annual deficit of something near nine millions.

The army numbered, at the same time, 11,714 men. Of these, the retired and half-pay list amounted to 3,800, and the number of officers in actual service to 2,000. The troubles since have doubtless augmented the numbers and the cost.

The navy is reported fifteen vessels and forty guns.

The church property in Mexico is estimated at between \$250,000,000 and \$300,000,000. Their property in the city of Mexico is rated at \$80,000,000. Adding to the income derived from contributions, from tithes, parochial dues and fees, and religious services, and sales of devotional articles, the total annual income of the church is estimated at eighty millions of dollars, of which more than seventy is derived from capital and fixed endowments.

RAILWAY AND STEAMBOAT ACCIDENTS.

The table of accidents in passenger traffic which we compile annually for the benefit of our reader are among the most instructive and useful records of the year. They show how far the companies who have charge of the conveyance of such vast numbers of our population have discharged conscientiously the responsibilities which it entails. It is only by the public's being kept accurately informed upon this point that the mischievous tendencies of monopolies can be counteracted and legislation brought to bear upon the carelessness and indifference which they are apt to create. Unless they are acquainted with the extent of the evils resulting from such causes, it is impossible that they can take effective measures to guard against them. It is to this vigilance on the part of the press that in a degree may be attributed the gratifying results to which we are about to point attention.

The following table shows the number of railroad accidents which have been attended with loss of life and injury to person during the year on this point of expiring, and, as will be seen, it offers a favorable comparison with that of the previous twelve months:

Months.	1858.			1857.		
	Accid's	Killed	Inj.	Accid's	Killed	Inj.
January.....	4	3	7	15	12	71
February.....	8	3	35	12	16	61
March.....	9	3	26	14	17	44
April.....	6	9	10	15	15	36
May.....	5	14	63	9	10	33
June.....	7	5	21	5	7	18
July.....	10	12	81	9	10	48
August.....	1	12	14	8	62	
September.....	12	12	78	15	18	63
October.....	8	11	23	11	8	50
November.....	8	4	56	3	3	9
December.....	5	43	5	5	5	10
Total.....	82	119	417	126	130	530

It should be stated that the above figures do not include accidents caused by the carelessness of travelers themselves, or deaths or injuries resulting from the reckless conduct of persons in crossing the railway tracks when trains are running.

The following additional table shows the number of accidents and the number of persons killed and injured during the last six years:

Year.	Accidents.	Killed.	Injured.
1853.....	138	234	496
1854.....	193	186	589
1855.....	142	116	539
1856.....	143	195	629
1857.....	126	130	530
1858.....	80	77	416
Total.....	832	938	3,190

It will be seen from the above that, as compared with 1857, the number of accidents this year exhibits a diminution of about forty per cent. and that there is a large decrease in the

number of persons killed and injured. Extending the comparison back to the previous five years, the result will show a much larger average of decrease.

As regards steamboat accidents the improvement is not of so marked a character, for the accidents themselves are not so much under the control of a careful supervision as in the case of railways. Still, as it will be seen by the following table, there is, as compared with the year 1857, a decrease of about eleven per cent. in the number of accidents, and four and a quarter per cent. in the number of fatal casualties:

Months.	1858.			1857.		
	Accid's	Killed	W'd	Accid's	Killed	W'd
January.....	2	15	11			
February.....	2	45	15	3	17	1
March.....	3	47	—	4	12	19
April.....	4	43	8	4	24	27
May.....	1	10	—	3	45	—
June.....	3	93	44	00	60	60
July.....	3	8	9	1	4	10
August.....	00	00	00	2	15	6
September.....	2	4	7	1	1	60
October.....	3	6	6	4	55	5
November.....	3	15	8	7	110	8
December.....	1	7	60	1	20	00
Total.....	27	300	107	30	332	86

For the last six years the number of lives lost and persons injured by steamboat accidents not including those which have occurred at sea, is as follows:

Years.	Accidents.	Killed.	Wounded.
1853.....	31	319	158
1854.....	48	587	225
1855.....	27	176	107
1856.....	29	358	127
1857.....	30	322	86
1858.....	27	300	107
Total.....	192	2,062	810

The first thing that will strike one in comparing the general results of the above tables, is the large proportion which deaths by steamboat accidents bear to the number of accidents themselves. Thus we find in six years 2,062 deaths to 192 accidents, whilst for the same period we have by railway casualties only 938 deaths to 832 accidents. This of course can only be attributed to the wholesale character of steamboat accidents, and the difficulty of escaping the double perils of fire and water.

The improvement under both heads exhibited by the present year is for us, however, the important feature of these tables. This gratifying fact is to be attributed to a variety of causes, amongst others the use of better materials by the railway companies in the construction of their tracks and locomotives, the substitution on steamboat lines of first class vessels for inferior ones, the greater vigilance enforced by the verdicts of juries and strictures of the press, and the employment of a more trustworthy and responsible class of servants. As these causes obtain a wider operation, there is no doubt that we shall find a proportionate decrease in the number of passenger casualties. In these, as in all similar enterprises, experience will convince those engaged in the traffic that their interests lie in the faithful discharge of the responsibilities which they have incurred.—*N. Y. Herald.*

BANKS OF BALTIMORE.

The *Clipper* gives the following account of the Banks of Baltimore:

There are 16 banks at present, in Baltimore, doing a regular banking business, viz: Merchants, Bank of Baltimore, Union, Farmers and Planters, Mechanics, Commercial and Farmers, Western, Farmers and Merchants, Chesapeake, Marine, Franklin, Citizens, Commerce, Howard, Fells Point Savings and Peoples. The aggregate amount of capital thus invested is \$10,266,841, whilst the aggregate circulation is set down at but \$2,972,244. A tabular view further informs

us that there is an aggregate decrease in the line of discounts, as compared with last year, of \$52,420; a decrease in circulation of \$196,099; an increase of deposits of \$1,434,410; an increase in specie of \$537,687; and an increase in capital of \$102,497.

The Savings Banks of Baltimore are also flourishing. An audited statement of that time honored institution known as the Savings Bank, and located on the corner of Gay and Second street, shows that though but little more has been received from depositors during the year than was paid out, yet from interest on loans, dividends on stocks, and other sources, the handsome amount is still left on hand of \$5,172,783 74. The Eutaw Savings Bank, we are happy to say, is no less prosperous. The amount received from depositors was \$449,951 63; and the amount paid such, \$325,621 23, and the amount of funds on hand, after paying all expenses, \$876,288 70.

The *Clipper* further says, a careful scanning of these figures will prove that there never was a time when they were more favorable. The indications of the books thus squared are full of promise, and except from some unforeseen contingency, the incoming year must, beyond a doubt, be one of unexampled activity and great prosperity.

HORACE GREELY ON THE ILLINOIS CENTRAL R. R.

A word in conclusion on railroads, especially the Illinois Central. This is a season of extreme depression for them all. There is very little travel, and not much freight, for the profundity of the mud will not allow the farmers to move what grain they have to their markets at the stations. The Railroad Receipts of Illinois for this month will be light beyond precedent. Many shareholders will be discouraged by the diminished receipts, and will sell out at the very worst season. I shall be disappointed if the receipts of next December on most roads in this quarter do not double those of the current month. The Central, which is and must remain primarily a freight road, shares fully in the depressions and must share likewise in the revival.

In its palmy days, I was inclined to look with disfavor on this enterprise, as I am not now. Whether the original stockholders make or lose by it, they have done a noble work, of which Illinois and the country will feel the benefit for ages. But their system of finance embodied one grand mistake. If, instead of selling their lands at high prices, mainly to speculators, they had sold them at low prices for cash down to actual settlers inflexibly—say \$2 50 per acre for 80 acres or less; \$3 per acre for \$160, and no more than 160 acres to any person, binding each buyer to erect and inhabit a dwelling on his lot, and break at least ten acres the first year, they would have had their lands all sold and settled, and a great local business in lumber, produce, etc., secured. As it is, their lands are in good part unsold, those sold will not be paid for when payment is due, and very few tracts are in the hands of actual settlers. There is a moral here by which other land grant roads may profit, if they will.

CHICAGO, IOWA AND NEBRASKA ROAD.—This road was completed to Lisbon fifty-four miles west of Clinton, on Saturday last.

MONETARY AND COMMERCIAL.

Since our last issue we have to note a continued easement in money matters, there being an abundant supply of currency, and the demands for money very moderate. The Banking Houses discount all first class paper for their customers at 10 to 12 per cent., with but little offering outside.

Eastern Exchange has an upward tendency, although the Bank of the Ohio Valley and the Commercial continue to check for their depositors at $\frac{1}{4}$ prem.

The New York Courier of January 11, says the Stock Market begins to feel the effect of increasing capital unemployed at this point. The greater facility for obtaining loans or stock collaterals, tends to give more firmness to prices. We note an advance to-day in Missouri Sixes $\frac{1}{4}$; New York Central Shares $\frac{1}{4}$; Michigan Central 1 $\frac{3}{8}$; Cleveland and Toledo $\frac{1}{2}$; Panama $\frac{1}{2}$; Illinois Central 1 $\frac{3}{8}$; Chicago and Rock Island $\frac{1}{2}$; Milwaukee $\frac{1}{2}$; Pennsylvania Coal Co. $\frac{1}{2}$; Pacific Steamship Company $\frac{1}{2}$. Although the Western Roads generally show a very limited business for the past few months, there is a general impression that their stocks will be substantially better for the business of the year 1859, and that dividends, after this year, may be resumed fairly by several that have recently deferred them.

Illinois Central jumped up to 72, but was slightly dull at the quotations after the early buyers had been supplid. The Africa brings confirmatory advices in regard to the loan negotiated by the English shareholders, but nothing new in reference to the financial scheme now under consideration.

ILLINOIS CENTRAL R. R., DECEMBER, 1858.

Land Department.			
Acres construction lands sold.....	2,146.68	for	\$25,927 97
" Interest fund " ".....	40.28	for	193 34
" Free " " ".....	273.30	for	3,673 16

Total sales during the month.....	2,460.26	for	\$29,794 47
To which add town lot sales.....			1,533 65

Total of all.....			\$31,328 12
Acres sold since 1st Jan., 1858.....	52,387.62	for	\$701,155 81
" sold previously.....	1,200,933.78	"	15,311,440 40
	1,253,321.40		\$16,012,596 21

Construction bonds cancelled in December, 1858.....	\$14,500		
Construction b'ds cancl'd prev'y.....	912,500		
			\$927,000 00

Free land b'ds cancl'd in Dec. '58.....	1,000		
" " " " previously.....	122,000		
			123,000 00

Total b'ds cancl'd up to Dec. 31, '58.....			\$1,050,000 00
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Traffic Department.			
Receipts from Passengers.....			\$53,774 40
do Freight.....			74,555 63
do Mails.....			6,316 50
do Rent of Road.....			2,250 00
do Other Sources.....			3,243 48

Total receipts in month of Dec., 1858.....	\$140,140 01		
do do do 1857.....	145,055 25		

Total receipts since 1st Jan., 1858.....	\$1,938,677 82		
do corresponding period of 1857.....	2,293,964 57		

SALES AT THE NEW YORK STOCK BOARD.—Jan. 10.			
\$500 Ohio State 6's, '60.....			101 $\frac{1}{2}$
500 Ill. Int. Imp. '47.....			103
\$6,000 Tenn. State 6's, '68.....			92 $\frac{1}{2}$
9,000 Virginia 6's.....			96 $\frac{1}{2}$
26,000 Miss. 6's.....			86 $\frac{1}{2}$
1,000 N. Y. Cent. Eds, 6's.....			91 $\frac{1}{2}$
3,000 do do 7's.....			101
7,000 Erie R. R. Bonds, '75.....			47
7,000 Erie R. R. Conv. Bs.....			45
10,000 Indson River 3d Mt.....			77
3,000 Mich. So. Second Mort. B'ds.....			63
45,000 Ill. Cent. R. R. B's.....			89 $\frac{1}{2}$
1,000 Gal. and Chic. 1st Mort.....			92 $\frac{1}{2}$
12,000 Cal. State 7's, new bonds.....			84 $\frac{1}{2}$
1,000 N. Y. State 6's, '73.....			115
3,000 Harlem R. R. 1st Mort.....			95
5,000 do do 2d do.....			94
2,000 do do 3d do.....			71
625 Shares New York Central.....			85 $\frac{1}{2}$
200 " Pacific Mail St. Co.....			93
275 " Erie R. R.....			16 $\frac{1}{2}$
100 " Hud. River R.....			35 $\frac{1}{2}$
300 " Harlem R. R.....			14
450 " Reading.....			53 $\frac{1}{2}$
225 " Mich. Cent.....			54
450 " Mich. S. & N. Ind.....			22 $\frac{1}{2}$
650 " Mich. S. & N. Ind. G'd Sk.....			49 $\frac{1}{2}$
100 " Panama.....			118
660 " Illinois Cent. R. R.....			72
25 " Clev., Col. and Cin.....			96 $\frac{1}{2}$
25 " Clev. and Pittsburgh.....			10
1750 " Galena & Chicago.....			72 $\frac{1}{2}$
600 " Cleveland & Toledo.....			33
400 " Chicago & Rock Island.....			60
325 " Milwaukee & Miss.....			13 $\frac{1}{2}$
1000 " LaCrosse & Milwaukee.....			2 $\frac{1}{2}$
100 " Reading Railroad.....			54

CLEVELAND AND PITTSBURG ROAD.

The Directors, at a recent meeting elected the following officers:

J. N. McCullough, President and Superintendent; C. E. Gorham, Assistant Superintendent, E. Rockwell, Secretary; W. W. Chandler, General Freight Agent; F. R. Myers, General Ticket Agent; J. Hovey, Master Machinist; W. S. C. Otis, Attorney; R. F. Smith, Pay Master.

WORKING OF THE ROAD.

The annual report of the General Superintendent presents the results of the working of the road during the year, from which it appears that there were—

Receipts from freight.....	\$421,749 40
Receipts from passengers.....	362,216 39
Do. from mails, express, rents, etc.....	48,127 74

The total cost of operation.....	\$772,493 53
	439,999 88

Net earnings.....\$332,493 65

The ratio of the cost of operation, in which is included repairs of locomotives and cars, repairs of the road and bridges, the renewal of the track, loss and damage, insurance, taxes and salaries, as well as all other items usually comprehended in working expenses, it is thus seen, is fifty-seven per cent. of the gross receipts.

The gross earnings for the year ending Nov. 30, 1857, were.....	\$789,924 20
The expenses of operating.....	443,937 16

Net earnings.....\$345,987 04

The increase in earnings in 1858 over those in 1857, has, therefore, been.....	\$32,169 33
The decrease in expenses.....	3,937 28

Net Increase.....\$36,126 61

The number of miles run in 1857, was 551,809. The number of miles run in 1858, was 646,413. So that, while the mileage has been increased twenty-five per cent., the expenses of operating are slightly reduced.

During the year there has been no collision and no loss of life or injury to passengers.

In conclusion, your Directors would say that the stockholders have a road of 205 miles in length, besides sidings, with an excellent road bed and superstructure, fully equipped with locomotives and cars, having a staple business in coal and other freight on the line of the road, and forming valuable connections with many important avenues of travel. They look to the revival of the general business of the country, and to the increased business which must flow to this road, from the sources which have been mentioned, for the reduction of the liabilities and the remuneration of the stockholders.

CLEVELAND, COLUMBUS & CINCINNATI R. R.—A statement of the earnings and expenses of this Co., for the past year, was presented at the annual meeting, on Wednesday, as we learn from the *Cleveland Herald*. This is made up of actual returns for ten months, and estimated returns for November and December. According to this statement, the result of the year's business is as follows:

Gross earnings.....	\$1,105,333 47
Expenses.....	534,961 04

Net earnings.....\$570,372 04

This amount is a fraction over twelve per cent. on the capital stock, which is \$4,746,100. A semi annual dividend of \$237,305 was paid August 1, 1858, which will leave \$333,067 to be divided at the present meeting. If a dividend of five per cent. should be declared, the surplus carried over will amount

to \$95,761. In comparing the actual receipts and expenses of 1855, 1856 and 1857, with the actual returns for ten months, and estimates for two months, of 1858, the following results appear:

	Receipts.	Expenses.	Net earnings.
1855.....	\$1,290,295	\$558,239	\$732,056
1856.....	1,329,754	628,919	700,835
1857.....	1,149,741	635,001	514,740
1858.....	1,105,343	534,961	569,372

DETROIT & MILWAUKEE RAILROAD.—The true position of this company will be best illustrated by the following brief statement made in the recent report of the President, of the amount required to meet the interest on its indebtedness:

Interest on first mortgage of \$3,205,000.....	\$327,870
Do. second do. 1,000,000.....	80,000
Do. third do. 750,000.....	75,000
Do. fourth do. 500,000.....	50,000
Do. share interest bonds.....	22,000

\$454,870

The working expenses will be about fifty per cent. of the receipts, and therefore to pay the amount of interest above set forth, will require a gross yearly traffic of about \$910,000, or \$17,000 per week.

The traffic has already, for several weeks, notwithstanding the utter stagnation of business and the entire absence of development of the resources of the country through which the line passes, reached an average of upwards of \$11,000 a week, and this may be taken as conclusive evidence that the local traffic alone, without any addition from through business, will hereafter be ample to meet the interest upon the present debt of the company.

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DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty. The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

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P. DUDLEY,
President of the Board.

Jan. 5 tf.

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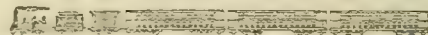
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64 Broadway, N. Y.

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING..... JAN 20, 189.

Railroad Record

PUBLISHED EVERY THURSDAY MORNING,
By WRIGHTSON & CO.

Office No. 167 Walnut Street

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Subscriptions and communications addressed to
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TO RAILROAD COMPANIES.

The Railroad Record is about to enter on its seventh year, and, although many doubts were entertained as to the success of the enterprise, it is still a fixed fact, and a living institution. We have many friends among Railroad men all over the country, but we want more, and intend to have them. The great difficulty with most railroad managers is that they have had but little experience in railroading, their whole time and attention having been devoted to their own private enterprises; such being the fact, it is to the interest of railroad companies that every director and officer should be supplied with copies of railroad papers. True, the plea of *economy* is to cut off these superfluities. The same kind of *economy* induces many to let their children grow up in ignorance, rather than buy the necessary books needed at school, thinking it very clever on the part of the State to provide schools and pay the teachers, but then to "do the thing up brown," they ought to buy the school books, too. Now the fact is, the directors give their time and what talents they possess, for the benefit of the companies, and the companies ought to furnish them with the means of transacting their business intelligently. One single error of judgment or knowledge prevented will compensate for ten year's subscription to our paper for every director in your road. Try it and see.

No. 48.—VOL. 6.]

THE MISSISSIPPI RIVER AND SOME OF ITS RESULTS.

The Mississippi River is in all respects one of the most interesting facts on the Globe. Its actuality, at the present time, far surpasses in magnitude and importance, any thing connected with any other river, even the famed Nile of Egypt. Historical associations are certainly not so numerous, or so magnificent; for the Mississippi, like the people who live on it, is recent, and but recently introduced to History. But, in what other feature does it not surpass all other of rivers? The Amazon? Well, the Mississippi is not so broad, at its mouth, nor drains so large a surface; but, what is the Amazon really to the Mississippi? Where is that vast fleet of Steamboats? Where are the arks, and boats, and rafts, which float down its stream? Where are the Railroads which meet on its banks? Where are the cities like New Orleans, St. Louis, and Cincinnati? Where is the mighty nation which dwells along its shores? In fine, looking at it in the grandeur of nature, or in its utility to society, or, in that almost unimagined splendor, with which it is to be crowned in the development of the American nation, what feature of any continent is more interesting or admirable, than the Mississippi River?

Taking its rise in the beautiful, limpid, gravel bottomed Lake Itasca, it runs about two thousand miles (measured in a *direct line*) to the Gulf of Mexico, its general course being continually South, and thus it passes over *thirty-three degrees of latitude*, and this is in itself, a wonderful fact. For, it thus spans almost all climates, from the land of the pine and cedar, to that of the orange and the lemon.

Then, again, look at its mighty arms!—the one (Missouri) spanning with its interlocking tributaries, the Rocky Mountains; the other (Ohio) spanning the Alleghenies, and thus, it embraces, and irrigates, and fertilizes, this vast body of land, which comprehends two-thirds the space of the American continent!

Then see how from lands and mountains it washes down, the rain and vegetable mould which make these bottoms so rich! Wonderful machinery of nature!

DR. DOWLER, of New Orleans, has prepared a very interesting article, (re-produced in *De Bow's Review*), on the Mississippi, in which the leading features of that river are well set forth, and some parts of which are worthy of comment. We copy some paragraphs. He says:

The Mississippi River annually discharges about thirty times more water than the Rhine, five or six times more than the Danube or Volga—a third more than the united waters of the Rhine, Loire, Po, Elbe, Vistula, Danube, Dnieper, Don, and Volga—three or four hundred times more than the Thames, fully as much as the Euphrates, Indus, and

Ganges, combined, and nearly twice as much as the Nile, equalling that of the Rio de la Plata, being surpassed only by the Amazon. The latter discharges thirteen hundred times more than the Thames—one hundred times more than the Rhine.

The immense water-shed of the river is, for the most part, several thousand miles distant from New Orleans, expanding from the summits of the Appalachian chain on the East, to those of the Rocky Mountains in the West, having, on its northern boundary, by far the largest fresh-water inland seas or lakes in the world. This area, whence the river gathers its tide, occupies about eighteen degrees of latitude by, perhaps, twice as many of longitude, and supplies throughout the entire year a vertical column of water from one hundred to two hundred feet for hundreds of miles above the mouth of river.

Among the most curious elements of the Mississippi are its *velocity*, and the *silt* or *debris* which it deposits. The former results from its immense volume, and the latter is the continued workings of its vast valley.

Several years since, Captain T. J. Crain of the Topographical Engineers measured the *silt* deposited in the Louisville Canal. We do not recollect the amount; but we know it was really astonishing. Consider this process as going on in the immense column of water flowing through the channel of the Mississippi to the Gulf, and going on for thousands of years, and is it not plain how the greater part of the Delta of the Mississippi has been formed?

And suppose it to go on for thousands of years more, aided by the coral insect, and is it improbable the land may be extended to the Mississippi Islands?

The following statements contain some most remarkable facts, which might make a study for any philosopher.

The velocity of the Mississippi seems to have been, for countless ages, nearly the same. Although great elevations and depressions must have occurred throughout the delta, yet these have been so gradual, and have alternated with such uniformity, as to be mere repetitions. The alluvial deposit, as far as ascertained (nearly 700 feet) is without coarse sand, gravel, stones, boulders, or other *debris* which a strong current pushes forward toward the sea. A swift descent of a great perpendicular volume of water, moves rocks as large as a house, a diminished one boulders, gravel, pebbles, coarse sand, fine sand, etc. The alluvium of the delta is virtually an impalpable powder held in suspension by a current far less rapid than is generally supposed. This deposited powder forms the low lands.

Professor Robins says, that when the current at the bottom of a river moves three inches in a second, it will separate and lift up fine clay—six inches per second, clay—eight inches per second, coarse sand—twelve inches per second, fine gravel—twenty-four inches per second, gravel one inch in diameter—thirty-six inches per second, angular stones the size of a hen's egg. Now, taking for granted the usual but the exaggerated estimate of the velocity of the river at New Orleans, during high water, it would be eighteen

inches per second, which, if the same at the bottom, would transpost large gravel.

Hundreds of observations, by Professor Forshey, are thus summed up:

"The result shows a mean surface velocity at high water of 2.61 miles per hour, at Carrollton (six miles above New Orleans,) and 2.60 miles per hour at Vidalia (nearly three hundred miles above New Orleans), respectively, 3.80 and 3.82 feet per second of time. The one was derived from 176 observations, and the other from 70 observations. At low water, at Carrollton, 1.45 miles per hour, or 2.11 feet per second; at Vidalia, 1.54 miles per hour, or 2.25 feet per second."

The difference between the depth of the river at high and low water (twelve to fourteen feet) is comparatively small in a river whose depth is from one hundred and twenty-five to two hundred feet, at all seasons. It is contrary to the hydrodynamics of rivers to suppose, with some writers, that the whole volume of water from the central surface to the bottom and sides, should move with a uniform velocity. If the mean elevation of the principal tributaries of the Mississippi (including, of course, the Missouri), be estimated, the accelerating velocity which a body of water would acquire, in falling from this elevation to a level with New Orleans, would be almost inconceivable—probable not less than that of a shot fired from a cannon, instead of being as at present two miles and a fraction per hour. The force of gravity, though uniform in a falling, unobstructed body, is in proportion to the time, but accumulates every moment, accelerating the motion as compared to any degree of the preceding, and this continuous generation proceeds *ad infinitum*. But in falling down an inclined plane, this water parts with its velocity, every moment, by friction against air, rocks, banks, curves, the bottom of the channel, and other resisting media.

The medical part of Dr. Dowler's article is curious. He is endeavoring to prove, that if the Mississippi River was only *let alone*, i. e., not *leveed*, or otherwise meddled with in the way of endeavoring to make it more healthy, or more safe, *then* it would, *probably*, be a remarkably healthy stream! For example, he says, the Yellow Fever has only prevailed since the *Levees* were made! He cites Mr. Darby—good authority—for the healthiness of Louisiana years ago,—long gone. Mr. Darby says:

"During almost ten years," says Mr. Darby, "I endured all that the summer's sun and winter's wind could inflict. Between the 9th of July, 1805, and the 7th of May, 1815, incredible as it may appear, I actually traveled upwards of twenty thousand miles, mostly on foot, between the Mobile Bay and Sabine River, and from the Gulf of Mexico to thirty-three degrees north latitude. During the whole of this period I was not confined one month, put all my indispositions together; and not one moment by any malady attributable to the climate. I have slept in the open air in some of the hottest summer nights for weeks together, and endured this mode of life in the most matted woods, perhaps, in the world. During my survey of the Sabine river, myself and the men that attended me existed for several weeks on flesh and fish, without bread and salt, and without sickness of any kind."

Mr. Darby's personal experience was valuable to himself. But let no man rely upon it in future. Thousands and tens of thousands have visited Louisiana in health to find an early grave. We have heard others speak in the same way, and it is not difficult to find numerous cases of longevity in Louisiana;—but there stands the great and admonitory fact that 1 in 20 die annually at New Orleans—and till that fact is changed, little need be said about its healthiness. No matter what the cause, the climate of Louisiana is fatal to those not thoroughly acclimated. It is not merely the number of deaths; but, the fact, that various kinds of bilious disease are engendered.

THE NEW TERRITORY OF ARIZONA.

Below we give an able editorial from the *Buffalo Commercial Advertiser* relative to the new Territory of Arizona. In one portion of the article the writer quotes from the *Washington Union*, a letter from Fort Fillmore, dated December 5th, stating that specimens of silver have lately been shown worth \$14,000 per ton. We have in our office a specimen of sulphuret of silver and copper from the Heintzelman mine, sent to us in a letter, and taken out of the mine on the 16th of December, 1858, which will yield \$20,000 per ton. It is indeed rare that such rich ores are found, and it is impossible at the present moment to say what is the extent of the rich deposit in the Heintzelman mine, but this much we do know that average results of all the smeltings from the ores of this mine has been \$945 per ton, and that, too, from ores obtained at the surface. The specimen to which we refer above, was obtained at the depth of thirty feet.

While it is generally conceded that not much important business will be transacted at this session of Congress, that the Pacific Railroad bill will not pass, and that the tariff will not be revised, little doubt is entertained that two new territories will be organized,—Dacoth, in the north-west, and Arizona in the south-west. While regular governments are doubtless needed for both these incipient States, the extraordinary mineral wealth of the latter, renders it an object of more general interest than the purely agricultural territory of Dacotah. The precious metals which have been in all ages the darling objects of human cupidity, are so important as the basis of that circulating medium which is the life-blood of trade, that the opening of every new source of supply is a note-worthy event in the history of the world. The richness of the California mines, has given a marked impetus to the business of the whole world, and their discovery was a matter of importance, not to this country alone, but to every region of the globe, to which civilization has penetrated. For a similar reason, Arizona is likely to hold important relations to all commercial countries.

Gold mines of extraordinary productiveness have lately been discovered on the Gila river, whither multitudes are flocking from California and other parts of the country. While

these gold mines may conduce more to the rapid settlement of the territory, we look upon the great abundance of silver which is known to exist there, as likely to supply a more deeply felt want of commerce. The wonderful tide of gold which California and Australia have poured into the channels of trade, renders silver comparatively scarce. Copper is too cumbersome and gold too precious for coins of small value; the former might answer for Gulliver's Brobdignag, and the latter for Lilliput, but among actual human beings it will hardly do to have dimes and quarters of a dollar, and equivalent pieces in other currencies, coined of either of these metals. Modern commerce will not stand the money of the ancient Spartans, or gold three cent pieces of homœopathic size. The fact that silver is almost the only available metal for the India and China trade, and that the growing commerce with these regions is making a constant drain in the silver of all nations engaged in it, show that additional sources of supply are among the great wants of modern trade. This want is more pressing felt than elsewhere in those countries of Europe, where bank notes of small denominations are not permitted to circulate. In France, for example, which has a large trade with China and India, the government has lately authorized the coining of gold five franc pieces, with a view to collect the silver coins of that denomination, and re-coin them into smaller pieces. It is predicted that she must either give up her trade with the East, or be drained of her silver in this new form, unless new sources of supply should be opened in the discovery of additional silver mines.

This great want in the circulating medium of the world is likely to be supplied by Arizona. All accounts from that region concur in representing its silver mines as surpassing in productiveness any that are at present worked. Specimens of silver ores from various mines have been brought to the States, and analyzed within the last year, and they have all proved to be very rich in the metal. On the strength of these analyses, companies have been formed, and large amounts of capital invested, and the business of silver mining is about to be prosecuted in the territory on a large scale, and with the advantage of the most powerful and effective machinery. We noticed, a few days ago, in the *Washington Union*, a letter from Fort Fillmore, dated December 5th, stating that specimens of silver have lately been shown, worth \$16,000 per ton.

Although the chief value of Arizona consists in its mines, it has considerable agricultural capabilities. On the banks of the Rio Grande, and the Gila and its branches, there are large tracts of arable land, entirely unoccupied and open for settlement, adapted to the growth of sugar, corn, cotton, and all the small grains, and capable of producing, by the aid of irrigation, two crops a year. Though the territory is not well timbered, the agricultural portions produce the mezquit in great abundance, which is described as excellent fuel; while there is pine and some oak in the mountains; a fine growth of ash in the San Pedro Valley, near its mouth; a limited quantity of walnut near the head of the Santa Cruz, while the country all along that river, and its branches, is heavily timbered with cotton wood of very large growth.

The territory is easily accessible from California, the Colorado river, which forms its

western boundary, being navigable by steam. The communication of intelligence between Arizona and the Atlantic States, is now comparatively rapid, as the Overland Mail Company have stations and houses every few miles through the territory, and there is constant travel and intercourse on the mail road between the settlements. It is computed that there are already twelve or fifteen thousand inhabitants in Arizona, and one sanguine letter writer in the territory predicts, if the present emigration from California and other parts continues, that before twelve months elapse, it will have a population of fifty thousand. However, this may be, it is destined to grow in population and importance, and its mineral wealth will make it a valuable member of our confederacy of States.

HARVEY'S SAFETY JOINT FOR T RAIL, TO PREVENT THE LOSS OF LIFE AND DESTRUCTION OF PROPERTY.

In the common arrangement, the splice plates are simply bolted to, and through the sides of the rails. It is well known that the vibration of the metal soon loosens the bolt, and makes the splice useless. In my arrangement the flat tongues fitting snugly at the top and bottom of the slots, assist that kind of resistance that is needed. Very broad surface opposed to the lines of vibration, besides which, the flattening down of the rails or concentration upon itself, by the pressure of the loads, will tend to tighten the tongues within the slots, and so strengthen instead of weakening the operation of the splice plates. This is not a splice plate that breaks joints simply, but in combination with the tongues or tongue, and the arrangement by which it covers and protects the heads of the spikes.

The allowance made for contraction and expansion is between the tongues and slots in the rail. The two splice plates weigh 15 lbs. each, of malleable iron,

At 5 cents per lb.	75 cts.
Three extra spikes,	5
Premium	8
	88 cts.
Defect difference in weight of chair and rails, 8 lbs. at 2½ cts. per lb.	20
	68 cts.

This is the actual cost per joint over the common T rail, or \$410 per mile. This is a small sum compared to \$2000 per mile, which is paid for the compound rail, in order to get a smooth road. But they have failed to get it even at that price. I mention these facts, to show that the difference between my improvement and the common T rail, will be but a secondary consideration for them, providing they can get a joint that will stand the test; therefore, I think there can be but little objection to the cost of my improvement, as it will make a perfectly smooth road, and save at least 50 per cent. in wear and tear in rails and machinery. This per centage does not take into the account, the destruction of life and property. It is a well known fact, that one half of the accidents that take place, are caused by the roughness of the roads, breaking the axles and wheels, causing the cars to go off the track. We all know the consequences of such accidents. For further information see advertisement.

TO THE STOCKHOLDERS OF THE PHILADELPHIA AND READING R. R. CO.

The managers respectfully submit the following account of the receipts, expenses and income, for the fiscal year ending 30th November.

[Here follows a long statement in great detail, which we condense as follows:]

Receipts of the Road:—

From travel 285,651, equal to 104,519 through passengers.	\$273,679 71
Merchandise, 187,729 tons.	335 911 94
Coal, 1,342,654 tons, at 1 20-91 cts.	1,865 693 61
United States mail.	18,703 00
Miscellaneous sources.	17,759 85
	\$2,510,750 91

Expenses—	
Transportation.	\$258,493 68
Roadway.	233,309 62
Drawbacks and allowances.	117,995 65
	1,199,798 35

Net profit for the year.....\$1,310,952 56

Interest on Bonded Debt—

Coupons to 1st of January, 1859.	\$708,714 00
Interest on Bonds and Mortgages, R. R.	30,967 00

Total interest for the year....\$739,701 00

Renewal Fund—

Five cents per 100 tons on 365,844,285 tons, transported one mile, during 12 months ending Nov. 30, 1858.	182,932 14
---	------------

Dividend fund for the year.....\$388,329 42

Which has been disposed of as follows, viz:—

Sinking fund, 1836-70.	\$25,000 00
Sinking fund, 1849-70.	75 000 00
Sinking fund, L. V., 1856-76.	50,000 00
State tax on capital for 1858.	18,389 63
Reserved dividend of 7 per cent. on \$1,551,800 preferred stock.	108,626 00
	\$277,015 63

Reserved fund of 1858.....\$111,313 79

The business of the past year, compared with 1857, shows the following results, viz:—

In merchandise, an increase of 111 7-10 tons in the quantity carried.	\$5,929 16 in receipts, and \$10,020 56 in profit.
In travel, a decrease of 6,028 passengers carried, equal to 3,520 through passengers.	\$14,854 63 in receipts, \$20,912 25 in profits.
In coal, a decrease of 167,046 2-20 tons in quantity, \$547,219 96 in receipts, \$282,801 23 in profit, and a small increase of \$1334 78, in mail and miscellaneous receipts.	
Transportation expenses have been—	
Decreased 10 62 100 cents per ton of coal carried.	
3 82-100 cents per ton of merchandise, and	
Increased 14 50-100 cents per through passenger.	
The net amount of freight and toll received on coal averaged—	
In 1857, 141 13-100 cents per ton carried.	
In 1858, 120 92-100 “ “	
and the per centage of expenses to gross receipts was—	
In 1857, 48 1-4 per cent.	
In 1858, 47 8-10 per cent.	

The latter, however, if allowance be made for the reduced rate of freight and toll, would be 58 8-10, instead of 47 8-10, showing a reduction of 10 per cent. in the working expenses of the road, during the present year.

The following comparative statement, which includes the miscellaneous charges omitted in the preceding comparisons, exhibits a decrease of \$335,737 71 in the amount of profit earned, viz:—

1857.	
Gross receipts.	\$3,095,521 56
Expenses.	\$1,481,745 92
Renewal.	120,008 21
	1,601,753 43
Profit.	\$1,493,768 13

1858.	
Gross receipts.	\$2,510,750 91
Expenses.	\$1,199,798 35
Renewal.	182,932 14
	1,382,730 49
	1,128,032 42
	\$335,737 71

Owing to the alteration in the rate of the appropriation for the renewal from eight cents to five cents per 100 tons carried one mile, as approved at the last annual meeting, the charge this year has been increased \$73,167 86. If this be deducted from the above the actual decrease in the year's profit is \$262,568 85.

As the earnings and expenses of the Lebanon Branch for the last eight months are included in the general account, and somewhat interfere with the correctness of the preceding comparisons, a detailed statement of the business of the Branch will be found in statement R, annexed to this Report.

The dividend fund for the year is exhibited as follows, viz:

Net profit from all sources.	\$1,128,030 42
Less interest on the bonded debt, (including those issued by the Lebanon Company.)	733,701 00

Dividend fund.....\$388,329 42 equal to 3½ per cent. on \$11,737,041 22, the total amount of the capital stock of the Company.

The charge for interest includes all the Bonds of the consolidated companies, and, as it will not be increased, may be considered as the fixed annual deduction from income. Any future improvement in business will, therefore, add to the dividend fund of the year.

While every economy has been practised in working the road, perfect efficiency has been maintained in every department, and at no time have the roadway and rolling stock been in better condition. The cost of transportation has been reduced partly by the lower prices of materials and wages, but chiefly by the decrease in the number of casualties arising from the superior condition of the road and machinery. The improvement in this respect is shown in the following statement of cars broken to tons of coal carried. In 1853, when the system of relaying and widening the track first commenced, the breakage was

	1 to 2,875 tons carried.
In 1856 it was.	1 to 4,950 “ “
In 1857 it was.	1 to 10,667 “ “
In 1858 it was.	1 to 27,955 “ “

The protracted depression of the iron trade, the stoppage of manufactories, and the general inactivity in business which existed at the close of 1857, sufficiently account for the falling off in the coal tonnage during the winter and spring of the past year, and affected, as upon other railroads, the general business of the Company. The greatest loss was on the line of the road, where the trade continues to be light, as many of the iron furnaces are still standing idle. The demand for the city and for shipment has been improving during the autumn, and the decrease at Richmond would have been made up, but for the great scarcity of vessels.

During the winter the trade had been reduced to the demand for immediate consumption, and high or low prices could have little effect, until there was some general improvement in business. Such, however, was the anxiety to force sales on the opening of navigation, that very low prices were established, and it became necessary to reduce freight and tolls 20 per cent. to meet the reductions on other regions. The total of the coal tonnage was not affected by these reductions, but they no doubt varied the quantity that would have

been done in the different regions. The business of last year was so exceptional in many respects, that the result must not be accepted as any indication of the future course of the trade.

The consumption of coal has been almost stationary during the last three years, and for the first time in the history of the anthracite coal trade, there has been two consecutive years of decrease. Former periods of stagnation have been followed by rapid expansions, and as the manufacturing interests and the iron trade will soon be in full activity, there is ground to hope that the coal trade will not be the last in recovering its former prosperity.

The following appropriation has been made of the year's income, viz :

Amount of profit per statement.....	\$1,310,952 50
Less renewal fund.....	152,922 14
Net profit.....	\$1,158,030 42
From which deduct for interest on bonds.....	\$702,714 00
Mortgages.....	20,947 00
	723,701 00
Dividend fund.....	\$389,329 42
Which has been disposed of as follows, viz :	
The sinking fund on Reading bonds.....	\$100,000 00
Lebanon Valley bonds.....	50,000 00
Together.....	150,000 00
Which, with \$123,244 08 from last year, will, at some future time, be distributed among the stockholders.)	
Taxes.....	18,789 63
Seven per cent. dividend declared on preferred stock to be paid hereafter.....	168,626 00
	277,015 63
Surplus.....	\$111,313 70
carried to credit of reserved fund.	
The balance at the credit of this fund at the end of last year, has been appropriated, as sanctioned at the last annual meeting, viz :—	
To losses and depreciation of assets.....	\$108,655 91
To loss on the negotiation of bonds due in 1856, issued on settlement of floating debt.....	654,260 18
Together.....	\$763,016 12
The amount of said balance :—	
The amount charged this year to income for Renewal Fund is.....	\$169,932 14
Out of which there has been expended.....	170,208 25
Leaving a balance of.....	\$12,713 89
applicable to the coming year.	

During the season eighteen miles of new track have been put into the road, and the relaying and widening has been completed up to Mohrsville. The total quantity of iron used for this purpose and for ordinary repairs during the year is—

4440 tons of new rails put in.
2600 tons of old rails taken out.

Excess..... 840 tons put into the tracks.

Henceforth less iron will be required for ordinary repairs, as almost all the bad 78 lb. rails that were laid in 1855 have been taken out of the road.

Since the opening of the Lebanon branch, the impossibility to pass the wide cars of connecting railroads has been found a serious impediment to the development of the business, and the widening of the tunnels at Phoenixville and at Manayunk could no longer be dispensed with. The work was, therefore, commenced at both places on the 1st December, and from the progress already made, it is fully expected that all the rock will be out by the middle of February, and every thing completed by the end of March. The continual passing and repassing of the regular trains requires unusual care and at-

tention, but it is hoped that the precautions taken to guard against danger will enable the engineers to carry through the work without accident or interruption to the business. This improvement will open the road between Harrisburg and Philadelphia to the wide cars of other companies, and permit bituminous coal and similar articles to be passed down direct to the iron works and manufacturers at the lower end of Schuylkill valley. Another advantage will be the introduction of more convenient passenger cars on the road. This work is one of the objects provided for by the increased allowance for renewal fund.

The relaying and widening track above Mohrsville will require two years to complete, and it will not be necessary to widen Port Clinton tunnel before 1861.

A viaduct over the railroad at Girard avenue is in course of construction, and will be completed early next spring. This is one of the bridges authorized last year to be charged to renewal fund.

Several of the new passenger railroads propose to cross the Reading Railroad at grade ; but as this would interfere with its business, and expose their own passengers to considerable risk of accidents, the managers offered to bear part of the expense of erecting bridges, to avoid the danger and inconvenience. As the offer was not accepted, the protection of the Supreme Court has been appealed to, to prevent such crossings being made, until some efficient system of precaution shall have been established for the safety of passengers.

A new freight depot has been built at Pottsville, on some property owned by the Company.

The Willow Street Railroad has been relaid with heavy street rails from Fourth street to the river, and the store and wharf have been put into good repair, and made convenient for business. Iron and heavy articles can now be shipped direct from the cars, at a considerable saving in expense and time, and the facilities afforded by this avenue to the Delaware, can not fail hereafter to promote the freight business on the railroad.

The only thing wanting to complete the business arrangements in the city is the building of a convenient freight and passenger depot on the Company's property at Broad and James streets. By concentrating the business in one place a saving in expenses could be made nearly equal to the interest on the capital required for its construction. The estimate for a complete depot is \$150,000. It is not necessary, however, to build it all at once, and the Managers propose, with your sanction, to proceed with it as fast as funds may become applicable for the purpose.

In accordance with the resolution passed at the adjourned meeting held on the 8th day of March, the consideration of the Lebanon Valley Railroad Company with the Philadelphia and Reading Railroad Company, was carried into effect, and on the 20th of March, 1858, the deeds were deposited with the Secretary of the Commonwealth, and the Lebanon Valley Company ceased to exist as a separate corporation. The outstanding accounts have been settled, and the cost of that road has been added to the capital account of the Reading Company. The total cost has been as follows, viz :

Roadway and bridges.....	\$3,644,751 25
Depots.....	37,438 00
Real Estate.....	26,312 67
Land Damages.....	268,375 67
Interest, Discount on Bonds, legal and	

other expenses.....	643,842 31
Balance of lots on Reading 1856 Bonds issued for this road.....	425,206 42

Together.....\$4,415,976 25

There are still a few cases of land damages and other matters to be assessed by juries, and some small expenditure to complete the depot at Harrisburg. It will also be necessary to complete and improve the connections with other railroads at Harrisburg and Reading. The outlay for these purposes will, in some measure, depend upon the amount of business to be accommodated, and the managers propose to proceed with them only as they become indispensable by the growth of the trade.

Considering that the road was opened during a period of extreme depression, the development of the business has been very satisfactory, and thus far has been steadily increasing. From the beginning of April to the end of November—

The gross earnings were.....	\$91,265 28
The Expense.....	49,942 56

Profit on Lebanon branch.....\$41,436 72

To which there should be added the amount earned on the Main Line from the same business, (carried with extra trains, and at a very trifling expense).....55,995 60

Total.....\$97,432 32

Eight months net profit from the business of the Lebanon Valley. The monthly net earnings have increased from

\$9,241 03 in April, to

\$18,113 75 in October,

being at the rate of nearly five per cent. on the cost of the branch. This is the more satisfactory, as during this period very little coal or iron are passed over the road—a large demand for both will spring up upon the revival of the iron trade, and it is expected that early in the Spring all the furnaces in both valleys will be in full operation, as at every station on the line new improvements are going on which are attracting to the road the business of their surrounding neighborhoods.

Upon the completion of the East Pennsylvania Railroad, a new continuous route will be established between New York and the West, shorter than any now existing, which, in addition to merchandise and passenger business, will command the cattle trade of Virginia, Ohio, and the far West. The great facility for pasturage on the banks of the Susquehanna, will attract the trade to Harrisburg ; and, in time, it may become the great central market from which the large cities on the seaboard will draw their future supplies.

With a business steadily increasing from existing connections, and a local trade already of importance and daily improving, the Lebanon Valley Branch will be found, at no distant date, to be a very important link in the chain of internal improvements, and must soon cease to be a burthen upon the resources of the consolidated companies.

The East Pennsylvania Railroad, from Reading to Allentown, on the Lehigh River, is approaching completion. It passes through a valley rich in deposits of iron ore and agricultural productions, which will hereafter pass over the Reading Railroad, to find their chief market in the Lebanon and Schuylkill Valleys. A mutually advantageous business will thus be established between the companies.

A contract for five years, with the option of extension, has been entered into with the Chester Valley Railroad Company, to work their road in connection with the Reading

trains, and to keep the roadway and buildings in good repair and working order. By this arrangement a troublesome and dangerous crossing at Bridgeport will be avoided, and in future this company will receive some compensation for the money expended at that place in sidings and other conveniences, which have hitherto been quite unproductive. It is estimated, also, that, by being worked conjointly, the tonnage of coal, iron, ore, lime, etc., which pass more or less over both roads, may be largely increased, to the mutual advantage of the two companies. The existing time arrangements of the Reading Company will permit connecting trains to be run very conveniently for the inhabitants of the Chester Valley, and the new business from thence will add very little to the working expensess of the Reading Railroad.

The following additions have been made during the year to the cost of the railroad, etc., as exhibited in the general balance sheet of the treasurer at the end of the year, viz:—

Account construction.....	\$19,301 59
" Real estate.....	13,562 28
" Willow street road.....	150,490 00
" telegraph.....	350 00
" Lebanon Valley Branch.....	4,415,976 38

Total added this year..... 4,549,290 25
Cost on 30th Nov., 1857..... 19,262,729 27

Total cost of the consolidated Railroads on 30th Nov., 1858.....\$23,811,910 52

The amounts expended on construction and real estate, amounting together to \$32,863 87 are the only additions not authorised and directed at the last annual meeting. The former consists of the new depot at Pottsville, improvements on Willow street and at places along the line, and the latter of several trifling purchases required for extensions, and some small payments on account of real estate bought in former years. The cost of the Willow Street Railroad, and part of the cost of the Lebanon Branch, were included in the assets of the Company at the end of 1857.

In settlement of these additions to the cost of the road, the following stock and bonds have been issued, and assumed as capital stock issued or to be issued:

In exchange for Lebanon Valley shares..	\$361,500 00
Reading 6% Bonds, due in 1856, issued.....	\$7,580,500
Lebanon Bonds, assumed on consolidation.....	1,500,000
	5,066,500 00

Bonds and mortgages on real estate, and for damages settled..... 12,000 90

Total issued during the year..... 5,460,000 00
Stock and bonds outstanding on the 10th Nov., 1857..... 18,472,991 22

Total capital stock and bonded debt on 30th Nov., 1857.....\$23,932,991 22
The excess of this over the total cost of the roads and equipment is..... 121,081 30
Add the balance of this year's income carried to reserved fund..... 111,313 70

Together..... \$23,995 00

Being surplus of capital represented by floating assets to be realized hereafter.

Of the loan of 1857, payable in 1856, there was issued, in settlement of floating debt of the Company, at the end of 1858, bonds to the amount of \$3,586,500, and the remainder of the loan, amounting to \$3,413,500, is held for the other purpose, for which it was created, viz., the redemption of the bonds to mature in the year 1860.

By the lamented decease of Charles S. Boker, Esq., a vacancy occurred in the Board of Managers, which has been filled by the

election of Jas. Dutton Steele, Esq., the engineer of the Road, and he has subsequently been appointed Vice President of the Company.

It may be proper to call attention to the peculiar advantages resulting from the Union with the Lebanon Valley, the connection with the Chester Valley, and that proposed with the East Pennsylvania Railroads. The effect, it is believed, will be largely to increase the general business; and while it will in no respect diminish its efficiency for the transportation of coal, it will open independent and valuable sources of revenue from passengers and general freight to be conveyed to and from the various points to which these railroads lead.

The Managers trust that the Stockholders will see in the small expenditures and diminished charges an anxious desire to conduct the affairs of the road with the utmost economy consistent with efficiency. It is their intention, if they receive a continuance of the confidence of the stockholders, to pursue the same system, so that in the course of the ensuing year, every outstanding current obligation will be paid in full, and a working capital may be accumulated sufficient for the ordinary business. This is believed to be the true policy of the company, and if this course is approved and sanctioned by the stockholders, and the earnings of the road are devoted to these purposes, any temporary inconvenience will be amply repaid by the permanent prosperity that must ensue.

By order of the Board of Managers,
R. D. CULLEN, President.
PHILADELPHIA, 10th January, 1859.

RAILROADS.

Governor Morgan, in his message, calls attention to the following figures furnished by the State Engineer in relation to railroads in this State:

No. of railroads.....	88
Capital stock.....	\$74,289,488 68
Capital paid in.....	68,198,758 25
Funded debt.....	63,942,135 40
Floating debt.....	4,549,290 69

Total expenditure.....\$136,669,690 34

Of this large investment only the following pay dividends:

No. of roads paying dividends....	14
Capital stock.....	\$43,712,400 00
Bonded and other debt.....	24,949,481 00

Total paying interest.....\$68,661,881 00

What proportion of the roads which do not pay dividends on the stock will continue to pay interest on the debt is not stated, but it appears that \$25,000,000, or nearly 40 per ct. of the capital so invested is unproductive. Of that amount, the Erie—\$11,000,000—the Harlem, and the Hudson River make nearly the whole amount. It is to be borne in mind, however, that when the subscription to the capital stock of the Harlem was solicited, it was urged that, even if the whole was lost, the dealers and property holders would be benefited by more than the amount through the collateral influences of the road. No doubt that the value of the property on the line of the Erie road, or through the Southern tier of counties, has been recently an annual value more than equal to the whole cost of the road, and that the benefits to New York city by the supplies drawn through that region have more than compensated for the loss. That, however, is not a reason why the stockholders should be made to suffer needless loss, since the injudicious management

which discourages railroad investments tends to prevent future general progress in the same direction. The progress of railroads in the United States for the year 1858 has been, according to the returns of the Railroad Journal, as follows:

UNITED STATES RAILROADS.

	1858.	
	Miles.	Cost.
New England.....	3,617	\$156,805,163
Middle States.....	6,893	366,376,888
South Atlantic.....	4,058	21,695,632
South West.....	1,517	49,461,051
North.....	8,619	290,065,124
Gulf.....	1,157	67,123,056
California.....	22	750,000
Total.....	25,965	918,146,600

	1859.	
	Miles.	Cost.
New England.....	3,823	\$152,960,825
Middle States.....	7,167	354,475,798
South Atlantic.....	4,316	107,934,177
South West.....	1,947	68,944,127
North.....	8,851	233,476,910
Gulf.....	1,551	44,735,727
California.....	22	1,500,000
Total.....	27,857	961,047,564

Increase..... 1,892 42,910,761

January, 1857.....	24,290
" 1856.....	21,440
" 1855.....	19,438
" 1854.....	15,411
" 1853.....	13,315
" 1852.....	10,878

The largest increase in any one year was in 1855, when 3,937 miles were opened. The difficulty of negotiating the means annually increased after that year, and the expense of roads swelled proportionately, since the expenses of financing were added to liberal contracts, until finally contractors were given the roads after construction, and were paid to take them, as in the case of the La Crosse, as shown before the Milwaukee Courts. Selah Chamberlain contracted for \$1,000,000 to construct a road which engineers say was heavily overpaid at \$500,000, but he received every dollar of the \$1,000,000 cash; the company then confessed judgment to him for \$629,000, not one dollar of which was due, and put him in possession of the road on that judgment. Let us compare the cost of Wisconsin roads. There are in operation fourteen roads, 775 miles. These cost as follows:

	Length.	Cost.	Per mile.
12 Roads.....	575	\$19,593,402	\$34,000
1 Road—La Crosse.....	200	15,980,703	79,900

The La Crosse cost 130 per cent. more than all the other roads. This cost is made up of capital, \$7,663,974 (stock sold at all prices for what it would bring); land grant bonds, \$4,000,000; mortgage bonds, \$950,000; and 3d Mortgage, illegal judgments, etc. \$3,372,734.

The general results in the Union are investments of (in round numbers) 1,000 millions, of which a share has been received from abroad. A very large portion of this is in the same position as those of New York State, being profitless to the holders. The works have, however, nevertheless been sources of great benefit to the country at large. The mere fact that they exist, that such enormous sums have been expended—say \$800,000,000—since the discovery of California gold, or 50 per cent. more money than that country has produced in that period, is of itself an evidence that the roads have been the means of at least developing a value equal to their own cost. Let us look back ten years to 1849—we had then 6,197 miles of road in the country and 23,000,000 of people, per census. Ten years have passed, and \$800,000,000 have been invested in means of transportation, by which all the States, num-

bering now 29,000,000 souls, are brought to a focus of a few hours breadth, and telegraph to a few minutes. In the next ten years those roads are to fulfill their mission to transport hourly increasing freights and numbers of people, without absorbing more capital in their construction. If so great a degree of prosperity has occurred in the last ten years, while that immense absorption of means to build roads has been going on, what will be the effect in the next ten years, when those roads will develop their full influence, without any special call for capital? California will still pour fourth its gold stream, and the railroads will draw wealth from sections. What will the 1,000 millions that these will add to the national wealth be employed in?

RAILROADS IN THE UNITED STATES, JAN. 1, 1859.

We give below a statement showing the mileage and cost of railroads in the United States, on the first day of January, 1859. The total number of miles in operation is 27,857, costing \$61,047,364. The increase of mileage in 1858 is 1,647. The ratio of increase for 11 years past has been as follows:

1848.....	5,265	.....
1849.....	8,197	992
1850.....	7,350	1,354
1851.....	8,856	1,506
1852.....	10,878	2,022
1853.....	13,315	2,437
1854.....	15,511	2,196
1855.....	19,438	3,927
1856.....	21,440	2,002
1857.....	24,290	2,850
1858.....	26,210	1,920
1859.....	27,857	1,647

The total mileage constructed in 11 years is 22,592. The annual amount of expenditure can not be stated with accuracy, but may be approximately estimated by annual amount of mileage opened.

There are at the present probably 6,000 miles of road in progress in the United States. Notwithstanding the commercial revolutions, the construction of railroads is steadily progressing, and will continue till the total mileage of the country shall reach 40 or 50,000 miles, and till every portion of the country is supplied with railway accommodations.

Tabular Statement showing the number of Miles of Railroad in operation in the United States, with the cost of each, January 1st, 1859.

MAINE	Miles in operation.	cost.
Androscoggin.....	37	\$672,287
Androscoggin and Kennebec.....	55	2,218,317
Atlantic & St. Lawrence.....	149	6,591,229
Buckfield Branch.....	21 1/2	460,000
Bangor and Piscataquis.....	13	323,263
Calais and Baring.....	11 1/2	224,000
Great Falls and South Berwick.....	6	363,937
Kennebec and Portland.....	63 1/2	2,671,264
Bath Branch.....	9	.....
Lewy's Island.....	17	296,500
Machiasport.....	12	100,000
Penobscot and Kennebec.....	54 1/2	1,539,702
Portland, Saco, and Portsmouth.....	54 1/2	1,500,000
Somerset and Kennebec.....	39	744,359
York and Cumberland.....	18 1/2	370,000
Total.....	544 1/2	\$18,767,833
NEW HAMPSHIRE.		
Ashuelot.....	24	\$395,518
Boston, Concord and Montreal.....	93	2,787,082
Cheshire.....	53	2,682,757
Cocheco.....	28	845,922
Concord.....	25	1,500,000
Contoocook Valley.....	14	230,400
Eastern N. H.....	16 1/2	525,205
Great Falls and Conway.....	20	432,995
Manchester and Lawrence.....	26	1,000,000
Merrimac & Connecticut Rivers.....	55	1,281,504
Northern.....	52	3,474,676
Portsmouth and Concord.....	47	1,100,000
Peterboro' and Shirley.....	9	211,156
Sullivan.....	24	1,559,000
White Mountains.....	21	371,038
Wilton.....	14 1/2	226,980
Total.....	502 1/2	\$18,685,333
VERMONT.		
Connect't & Passumpsic Rivers.....	90	\$2,531,147
Rutland & Burlington.....	119 1/2	4,584,068
Rutland and Washington.....	62	1,771,613
Vermont Central and Vt. & Can.....	169	9,782,750
Vermont Valley.....	24	1,301,286
Western Vermont.....	54	1,083,561
Bennington Branch.....	6	.....
Whitehall and Rutland.....	7	253,700
Total.....	531 1/2	\$21,310,727

MASSACHUSETTS.		
Amherst and Belchertown.....	19 1/2	\$295,337
Berkshire.....	21	600,000
Boston and Lowell.....	20 1/2	2,412,251
Woburn Branch.....	2	.....
Boston and Maine.....	74 1/2	4,229,231
Medford Branch.....	8 1/2	.....
Boston and New York Central.....	74 1/2	3,692,144
Medway Branch.....	2 1/2	32,554
Boston and Providence.....	47 1/2	3,534,454
Dedham Branch.....	3 1/2	.....
Stoughton & Easton Br'ch.....	8	150,297
Taunton Branch.....	11	313,156
Boston and Worcester.....	45	.....
Brookline Branch.....	1 1/2	.....
Charles River Branch.....	8 1/2	4,843,779
Newton Lower Falls Br'ch.....	1 1/2	.....
Saxonville Branch.....	3 1/2	.....
Milford Branch.....	12	.....
Agricultural Branch.....	2 1/2	312,838
Milbury Branch.....	3	.....
Cambridge (Horse).....	5	316,777
Cape Cod.....	46	1,661,625
Fairhaven Branch.....	15	96,085
Connecticut River.....	50	1,801,944
Danvers.....	9 1/2	203,150
Dorchester Avenue (Horse).....	4	96,224
Eastern.....	44	.....
Saugus Branch.....	6 1/2	.....
Marblehead Branch.....	4	4,500,219
Gloucester Branch.....	10	.....
Amesbury & Salisbury Br.....	5	.....
Essex.....	21	747,009
Fitchburg.....	51	3,540,000
Watertown Branch.....	2	.....
Marlboro' Branch.....	15	156,185
Fitchburg and Worcester.....	14	300,000
Grand Junction.....	9	1,89,462
Hampshire and Hampden.....	25	508,128
Hartford and New Haven.....	See Conn't.	.....
Lexington and West Cambridge.....	6 1/2	250,357
Horn Pond Branch.....	10 1/2	363,158
Lowell and Lawrence.....	2 1/2	299,629
Metropolitan (Horse).....	8 1/2	149,496
Middleboro and Taunton.....	2	250,000
Middlesex (Horse).....	14 1/2	654,603
Nashua and Lowell.....	20	545,004
New Bedford and Taunton.....	27	626,632
Newburyport.....	9	.....
New London, Willim. & Palmer.....	32	See Connect't.
New York and Boston, in Mass.....	16	See Connect't.
Norwich and Worcester.....	79 1/2	3,362,919
Old Colony and Fall River.....	34 1/2	136,729
Dorchester & Milton Br'ch.....	14	565,327
Arlington & Bridgewater Br.....	1 1/2	443,678
Peterboro' and Shirley.....	15 1/2	439,138
Pittsfield and North Adams.....	43 1/2	1,285,246
Providence, Warren & Bristol.....	17 1/2	449,630
Providence and Worcester.....	8	204,920
Salem and Lowell.....	11 1/2	601,304
South Reading.....	22	448,700
South Shore.....	13	267,364
Stockbridge and Pittsfield.....	69	3,268,314
Stony Brook.....	9	18,978
Vermont and Massachusetts.....	156	10,778,232
Waltham & Watertown (Horse).....	2	39,600
Western.....	45 1/2	1,328,693
West Roxbury (Horse).....	.....	.....
West Stockbridge.....	.....	.....
Worcester and Nashua.....	.....	.....
Total.....	1,519 1/2	\$67,157,339
CONNECTICUT.		
Boston and New York Central.....	8	See Mass.
Hartford and Norwalk.....	24	383,010
Hartford, Providence & Fishkill.....	122 1/2	4,602,966
Housatonic.....	74	2,438,447
Naugatuck.....	57	1,578,201
New Haven and Hartford.....	72	3,329,612
" and Northampton.....	55	1,400,000
" N. Lond'n & St. Albans.....	62	1,200,000
N. Lond'n, Willimantic & Palmer.....	57	1,603,231
New York and New Haven.....	62 1/2	5,258,232
Norwich and Worcester.....	50	2,616,812
Total.....	644 1/2	\$24,260,141
RHODE ISLAND.		
New York, Providence & Boston.....	50	\$2,479,532
Total.....	50	\$2,479,532
NEW YORK.		
Albany and West Stockbridge.....	38	\$2,007,207
Albany Northern.....	32	2,010,655
Troy Branch.....	1	.....
Black River and Utica.....	35	1,921,020
Brooklyn City Roads.....	21	1,026,769
Buffalo and New York City.....	92 1/2	3,491,868
Buffalo and State Line.....	68	2,739,926
Buffalo, Corning and New York.....	100	2,619,486
Canandaigua and Elmira.....	47	1,275,795
Canandaigua and Niagara Falls.....	100	3,495,833
Chemung.....	17	450,000
Cayuga and Susquehanna.....	35	4,187,562
Corning and Blossburg.....	15	496,561
Flushing.....	8	810,962
Hicksville and Cold Spring.....	4	52,000
Hudson and Boston.....	17	175,000
Hudson River.....	144	14,000,000
Long Island.....	98	2,565,792
Syosset Branch.....	2 1/2	.....
New York and Erie.....	44 1/2	34,598,108
Newburg Branch.....	19	.....
New York and Harlem.....	133	6,112,409

NEW YORK CENTRAL.....	655	20,515,815
New York City Roads.....	24	2,703,241
N. York and N. Haven.....	See Conn't.	.....
Niagara F. R. and Lake Ontario.....	13	593,729
Northern (Ogdensburg).....	118	4,741,187
Champlain Branch.....	4	.....
Oswego and Syracuse.....	36	732,720
Pittsburg and Montreal.....	20	347,775
Potsdam and Watertown.....	75	1,505,529
Rensselaer and Saratoga.....	25	960,227
Rochester and Genesee Valley.....	18 1/2	849,588
Rutland and Washington.....	See Vermont	.....
Sackett's Harbor and Ellisburg.....	13	39,310
Saratoga and Schenectady.....	21	4,06,659
Saratoga and Whitehall.....	47	895,421
Syracuse and Binghamton.....	60	2,083,163
Troy and Binghamton.....	5	294,931
Troy and Boston.....	27	1,422,158
Troy and Greenbush.....	6	294,751
Troy and Rutland.....	17	380,819
Troy Union.....	2	131,432
Watertown and Rome.....	97	2,159,693
Total.....	2,684 1/2	\$19,450,104
NEW JERSEY.		
Belvidere and Delaware.....	64	\$2,937,614
Burlington and Mt. Holy.....	6	120,000
Camden and Amboy.....	98	5,563,580
Camden and Atlantic.....	60	1,713,158
Flemington.....	12	288,518
Freehold and Jamesburg.....	11	220,666
Milstone and New Brunswick.....	6 1/2	111,114
Morris and Essex.....	51	1,000,825
Newark and Bloomfield.....	6	101,382
New Jersey Central.....	24	3,665,918
Paterson and Hudson River.....	64	3,193,597
Paterson and Ramapo.....	14	670,000
Sussex.....	15 1/2	350,000
Warren.....	12	757,079
Wairren.....	18	1,519,400
Total.....	471 1/2	\$24,441,035
DELAWARE.		
Delaware.....	71	\$1,200,003
Newcastle and Wilmington.....	16	741,371
Newcastle and Frenchtown.....	6	93,000
Total.....	93	\$2,034,354
MARYLAND.		
Annapolis and Elkridge.....	21 1/2	420,000
Baltimore and Ohio.....	379 1/2	24,892,645
Branches.....	7 1/2	.....
Northern Central.....	138	7,238,341
Western Maryland.....	14	280,000
Washington Branch.....	30	1,650,000
Phila., Wilmington and Balt.....	102	8,568,269
Various Coal Railroads.....	100	3,000,000
Total.....	791 1/2	\$45,059,355
PENNSYLVANIA.		
Allegheny Valley.....	44	\$1,968,317
Barclay Coal.....	16 1/2	309,000
Beaver Meadow and Branches.....	40	1,500,000
Catawissa, Williamsport & Erie.....	63 1/2	3,640,000
Chester Valley.....	21	1,270,000
Chestnut Hill Branch.....	3 1/2	201,000
Cleveland and Erie.....	See Ohio.	.....
Cleveland and Pittsburg.....	62	1,236,675
Cumberland Valley.....	31	600,000
Danville and Pottsville.....	64	2,500,000
Dauphin and Susquehanna.....	17	854,823
Delaware and Hudson.....	110 1/2	8,013,761
Branches.....	26	1,000,000
Delaware, Lackawanna & Western.....	110 1/2	8,013,761
East Pennsylvania.....	19	757,000
Erie and North East.....	22	240,000
Franklin.....	17	350,000
Gettysburg.....	17	169,445
Hanover Branch.....	76	1,881,967
Harrisburg and Lancaster.....	19	285,000
Columbia Branch.....	14 1/2	1,388,168
Hazleton and Lehigh.....	35	1,184,997
Huntingdon and Broad Top.....	30 1/2	1,000,000
Branches.....	10 1/2	.....
Lackawanna.....	9	300,000
" and Bloomsburg.....	57	1,425,000
Lebanon Valley.....	54	2,500,000
Lehigh Valley.....	48	2,266,523
Little Schuylkill.....	28	1,837,926
Branches.....	10	.....
Littlestown.....	11	250,000
McCauley's Mountain.....	6	309,000
Mauch Chunk and Summit Hill.....	8	1,000,000
Branches.....	21	.....
Mine Hill & Schuylkill Haven.....	25	2,400,000
Extension and Branches.....	82	196,480
Mount Carbon and Branches.....	8	100,000
Mount Carbon and Port Carbon.....	4	.....
Northern Central.....	See Md.	.....
Northern Pennsylvania.....	55 1/2	5,771,678
Doylstown Branch.....	10 1/2	.....
Pennsylvania.....	249	20,298,167
Branches.....	27 1/2	.....
Allegheny Portage.....	37	2,100,027
Philadelphia Division.....	8	5,277,378
Pennsylvania Coal Companies.....	45	1,996,819
Philadelphia and Balt. Central.....	13	350,000
" City Railroads.....	10	1,000,000
Phila., Germantown & Norristown.....	17	1,175,812
Germantown Branch.....	4	.....
Philadelphia and Reading.....	93	19,263,720
City Branch.....	4	.....

Philadelphia and Sunbury.....	33	1,348,812	Marian.....	14	210,000	Peru and Indianapolis.....	74	2,000,000
" and Trenton.....	23	1,000,000	Mobile and Girard.....	57	1,200,000	Pittsburg, Ft. Wayne & Chicago	..	See Penn.
" Wilmeton & Balt.....	..	See Md.	" and Ohio.....	307	10,701,426	Rushville and Shelbyville.....	20	120,000
Pittsburg and Connellsville.....	68	2,255,606	Montgomery and West Point... 77	2,235,335	Shelbyville lateral.....	16	230,000	
" and Erie.....	11	250,000	Opelika Branch.....	28	..	Terre Haute and Richmond....	73	1,611,450
" Ft. Wayne & Chicago.....	465	11,279,704	Total.....	671	\$19,946,761	Toledo, Wabash and Western....	..	See Ohio
" and Stubenville.....	42	2,500,000				Union Track.....	3	265,933
Quakake Valley.....	143	300,000				Total.....	1,568	\$49,163,847
Schuylkill Valley.....	25	500,000						
Sunbury and Erie.....	403	4,625,156						
Tioga.....	203	859,694						
Trevorton and Susquehanna.....	14	675,000						
Westchester.....	9	765,000						
Westchester, Media and Phila..	28	1,000,000						
Williamsport and Elmira.....	78	3,464,454						
Wrightsville, York & Gettysburg	123	433,331						
Various coal roads not named in	..	..				
the above list.....	400	8,000,000						
Total.....	3,129	\$142,590,950						
KENTUCKY.								
Breckenridge.....	8	\$312,000						
Covington and Lexington.....	80	4,353,971						
Lexington and Big Sandy.....	17	694,024						
" and Danville.....	13	824,483						
" and Frankfort.....	29	658,536						
Louisville and Frankfort.....	65	1,589,566						
" and Nashville.....	99	3,534,980						
Lebanon Branch.....	37	..						
Maysville and Lexington.....	19	..						
Paducah and Mobile.....	20	1,600,000						
Portland and Louisville.....	5	100,000						
Total.....	400	\$13,149,280						
VIRGINIA.								
Alexandria, Loudoun & Hamp's	41	\$889,020						
Clover Hill.....	15	300,000						
Manassas Gap.....	76	2,843,403						
Norfolk and Petersburg.....	60	1,453,523						
Norfolk Western.....	104	5,628,751						
Orange and Alexandria.....	89	..						
Warrenton Branch.....	9	3,010,097						
Extension.....	25	..						
Petersburg.....	64	1,204,115						
Gaston Branch.....	19	..						
Richmond and Danville.....	140	8,486,674						
Richm'd, Frederick & Potomac..	76	1,817,179						
Richmond and Petersburg.....	22	1,205,411						
Port Walthall Branch.....	3	..						
Seaboard and Roanoke.....	80	1,402,087						
South Side.....	123	3,786,387						
City Point Branch.....	10	..						
Virginia Central.....	206	7,515,768						
Virginia and Tennessee.....	204	6,582,370						
Salt Works Branch.....	9	..						
Winchester and Potomac.....	32	575,483						
Washington and Alexandria.....	6	200,000						
Various Coal Roads.....	40	400,000						
Total.....	1,474	\$47,402,331						
NORTH CAROLINA.								
Atlantic and South Carolina.....	95	\$1,922,703						
North Carolina Central.....	223	4,235,030						
Raleigh and Gaston.....	97	1,260,241						
Roanoke Valley.....	22	450,070						
Wilmington and Manchester.....	171	2,379,168						
Wilmington and Weldon.....	162	2,854,610						
Total.....	770	\$13,101,792						
SOUTH CAROLINA.								
Blue Ridge.....	19	\$1,720,023						
Charleston and Savannah.....	23	1,787,674						
Charlotte and South Carolina..	110	1,719,045						
Cheraw and Darlington.....	40	600,000						
Greenville and Columbia.....	113	2,487,461						
Abbeville Branch.....	12	..						
Anderson Branch.....	9	..						
King's Mountain.....	23	196,230						
Laurens.....	22	213,476						
North-Eastern.....	102	1,907,278						
South Carolina.....	136	7,583,037						
Camden Branch.....	37	..						
Columbia Branch.....	69	802,598						
Spartanburg and Union.....	26	..						
Total.....	781	\$18,021,841						
GEORGIA.								
Atlanta and La Grange.....	86	\$1,171,716						
Augusta and Savannah.....	53	1,030,100						
Barnesville and Thomaston.....	16	300,000						
Brunswick and Florida.....	31	800,000						
Central.....	162	3,756,000						
Etoah.....	8	150,000						
Georgia.....	171	4,174,492						
Warrenton Branch.....	39	..						
Atlanta Branch.....	17	..						
Washington Branch.....	101	1,500,000						
Macon and western.....	21	63,766						
Main Trunk.....	17	2,000,000						
Milledgeville and Gordon.....	22	..						
" and Eatonton.....	50	1,215,518						
Muscogee.....	20	300,000						
Rome.....	68	1,151,751						
Savannah, Albany and Gulf....	116	2,960,723						
South-Western.....	128	5,901,497						
Batle Branch.....	9	..						
Cuthbert Branch.....	138	..						
Western and Atlantic.....	138	..						
Total.....	1,174	\$24,368,163						
ALABAMA.								
Alabama and Florida.....	48	1,000,000						
" " Mississippi.....	30	600,000						
" " Tennessee.....	99	2,000,000						

RECAPITULATION.		
Maine.....	54 1/2	\$18,767,832
New Hampshire.....	56 1/2	18,075,232
Vermont.....	73 1/2	21,310,727
Massachusetts.....	1,519 1/2	67,157,359
Rhode Island.....	50	2,479,532
Connecticut.....	64 1/2	24,260,141
<i>Total New England.....</i>	<i>3,823</i>	<i>\$152,960,285</i>
New York.....	2,684 1/2	139,450,104
New Jersey.....	47 1/2	24,441,035
Pennsylvania.....	3,029 1/2	142,590,950
Delaware.....	93	2,034,354
Maryland.....	79 1/2	45,759,355
<i>Total Middle At. Sts.....</i>	<i>7,167</i>	<i>\$354,473,793</i>
Virginia.....	1,474	\$17,402,381
North Carolina.....	770	\$13,101,732
South Carolina.....	781	18,021,841
Georgia.....	1,174	24,298,163
Florida.....	157	3,140,000
<i>Total S. Atlantic States.....</i>	<i>4,356</i>	<i>\$107,934,177</i>
Arkansas.....	39	\$1,000,000
Missouri.....	517	30,004,150
Tennessee.....	962	23,99,668
Kentucky.....	400	12,149,280
<i>Total S. Interior States.....</i>	<i>1,917</i>	<i>\$68,914,127</i>
Ohio.....	2,724	\$102,756,614
Indiana.....	1,508	49,113,847
Michigan.....	960	35,749,214
Illinois.....	2,672	96,284,445
Wisconsin.....	775 1/2	35,574,117
Iowa.....	247 1/2	10,988,673
<i>Total N. Interior States.....</i>	<i>8,986</i>	<i>\$230,476,910</i>
Alabama.....	671	\$19,946,761
Mississippi.....	306	8,383,916
Louisiana.....	980 1/2	13,804,700
Texas.....	187 1/2	4,676,360
<i>Total Gulf States.....</i>	<i>1,554</i>	<i>\$44,753,527</i>
California.....	92 1/2	\$1,600,000
TOTAL UNITED STATES.....	27,857	\$961,047,364

American Railroad Journal.

THE SUNBURY & ERIE RAILROAD.

PHILADELPHIA AND THE LAKES.

Extract from the Report of Governor Bigler, formerly President of the Sunbury & Erie Railroad:—

Besides, the enterprising citizens of Philadelphia, having completed nearly all other schemes of internal improvement deemed important to the advancement of her commercial greatness, can now wisely turn their attention, almost exclusively, to the construction of an avenue to the lakes. We trust that we may be indulged in the suggestion, at this point, that the construction of the Sunbury & Erie Railroad, is, in our opinion, better calculated to promote their interest, as a commercial and manufacturing people, than all other similar schemes combined, except only the Pennsylvania Railroad.

The benefits to those local works which bring to the city only that which she can not lose, and those schemes in other States, for which her people are too frequently taxed, sink into utter insignificance, when compared with the advantages which must inevitably result from a direct road to the Lakes, and the far West. First, whoever will take the trouble to trace the route of the Sunbury & Erie Railroad and its connections, on the map of our State, and consider the character of the country through which it extends, and calculate the sources of mineral wealth with which that country abounds, can not fail to be convinced of the truth of what we allege. Extending through a country of almost inexhaustible stores of wealth, in the shape of coal, iron ore, and lumber, its western terminus (Erie) is found at the very focus of the accumulations of Western produce, and the point where the contest between Philadelphia and her powerful rivals in the North, is to be decided. At present, and with the avenues now in existence, Philadelphia is power-

less at that point. The construction of this road will give her the advantage over New York, of a hundred miles in lineal distance, with a road of lower grades and less curvature. Left to her own power as a commercial city, with only equal opportunities of transportation, she might fail to gain any considerable share of trade; but when we add to her attractions as a great manufacturing and commercial city, the advantages of nearly one hundred and fifty miles of lineal and equated distance in transportation, and those of a longer season of lake navigation, who can doubt her success? By this route she can reach the lakes at the end of 426 miles, while New York, by the shortest of her lines, is at a distance of 510 miles, and by the other, 535 miles, adding to this difference in lineal distance, the admitted advantages of the Pennsylvania route in grades and curvatures, the actual difference may be safely stated at 140 miles against the shortest New York route, and 165 against the longest. Thus proving clearly what the New York press has recently and repeatedly alleged, that when Sunbury & Erie Road shall have been completed, the best route for travel and tonnage, between New York and the cities of Cleveland and Erie, will be by the way of Philadelphia.

But it is unnecessary to discuss this subject further. The most reliable laws, fixing railroad capacity and usefulness, are a sheer fiction, if they do not establish the utility and success of this work. The elements comprising these laws are distance, grades and curvatures, and none will pretend that these are not in favor of the Sunbury & Erie, as against any other road now in existence, or that can hereafter be constructed.

THE TRADE OF THE LAKES.

Extract from the Report of Robert Fairies, Esq., Civil Engineer.

The great object of the Sunbury & Erie Railroad should be, to secure to the City of Philadelphia the trade of the Lakes as well as that of the Western and Southwestern States, by the most direct route, and, at the same time to develop the resources of northern Pennsylvania to the greatest possible extent. By the Driftwood and West Creek route, the distance is increased seven miles over the route by Bennett's Branch and Trout Run, to reach Ridgway, the natural point of connection with the Venango Road, a connection certainly of much greater importance to the city of Philadelphia, than one with the New York & Erie Road at Olean. But, independently of the advantage of seven miles in distance saved, by adopting the Trout Run route, fifteen additional miles of the Sunbury & Erie Road will apply to a direct connection with the Alleghany Valley Railroad, leaving to be made a link of only forty-four miles, between Winslow, on Bennett's Branch of the Sinnemahoning, at the mouth of Trout Run, and Brookville, on the line of the Alleghany Valley Road. When these roads shall have reached those points, this connection will, undoubtedly, at once be made, and thus afford to the city of Philadelphia, as I shall hereafter show, a route for the West, far superior to that by the Pennsylvania Central Road.

It appears to me very clear, from all these considerations, that the Trout Run route is the one that should be adopted for our road. It is not my intention to detract from the merits of the Pennsylvania Road, or the great benefits that have resulted to Phila-

delphia by its construction, but merely to show to the Board, as well as to the citizens of Philadelphia and Pittsburg, that a great error was committed in the selection of the Central Pennsylvania route in the first instance, an error which can only be remedied by the construction of the Sunbury & Erie Road, and connecting it with the Alleghany Valley Road, so as effectually to secure to the city of Philadelphia, the trade of the Southwestern and Western States, as well as that of the Lakes.

From the examinations made by Mr. Jarrett, the fact has been fully established that the main summit of the Alleghany Mountains, between Harrisburg and Pittsburg can be overcome with gradients not exceeding twenty-six and four-tenths feet per mile; and that even grades of this character will only be required for about five miles approaching the summit, between Bennett's Branch and the Sandy Lick. On the Susquehanna, or what is now termed the Northern Central Road, there are no grades between Harrisburg and Sunbury, a distance of fifty-three miles, over ten feet per mile; and on the Sunbury & Erie Road, from Sunbury to Winslow, and on the Bennett's Branch to the mountain branch of the stream, a distance of one hundred and fifty-three miles, no grade over sixteen feet to the mile. From this point it is only five miles to the summit between Bennett's Branch and the Sandy Lick, requiring a grade of 26 4-10 feet per mile. From this summit to Brookville, a distance of twenty miles, there will be a descending grade, and from Brookville to Pittsburg, no grade going west over ten feet per mile; while from Pittsburg, east to the summit, at the head of Sandy Lick and Bennett's Branch, the highest grade is twenty-six feet per mile, and that only for seventeen miles, leaving ninety-one miles between these points with gradients not exceeding ten feet.

On the Central Pennsylvania Road, the maximum gradient from Harrisburg to Lewis-town, a distance of sixty miles, is sixteen feet per mile; from Lewistown to Altoona, a distance of seventy-two miles, twenty-one feet per mile; and from Altoona to the Summit, a distance of twelve miles, ninety-six feet per mile; west of the Summit, a distance of one hundred and eight miles, the ruling grade, both ways, is fifty-two and eight-tenths feet per mile.

The highest point on the Pennsylvania Railroad is twenty-one hundred and seventy-two feet above tide water, and the whole rise and fall between Harrisburg and Pittsburg, four thousand two hundred and fifty feet. By the Sunbury & Erie, and Alleghany Valley route, with a tunnel between Bennett's Branch and Sandy Lick, sixteen hundred feet shorter than the tunnel at the summit on the Pennsylvania Road, the highest point above tide will be fourteen hundred and fifty feet, and the whole rise and fall between Harrisburg and Pittsburg, two thousand one hundred and thirty feet. In neither instance have I taken into consideration the slight undulating grades under ten feet; had I done so, the comparison would have been still more favorable for the Sunbury & Erie route. In point of curvature, it will also have greatly the advantage over the Central Pennsylvania Road.

The equated distance from Harrisburg to Pittsburg, by the respective routes, stand as 810 miles is to 549.5 miles, and from Pittsburg to Harrisburg as 597 miles is to 440 miles; therefore, at the rate of ten miles per hour on the Pennsylvania Central Road, it

The Boston and Providence Railroad Company have declared a dividend of \$3 00 per share, payable on the 3d inst.

THE PHILADELPHIA, WILMINGTON AND BALTIMORE RAILROAD CO.—It will be seen from the operating expenses of the Philadelphia, Wilmington and Baltimore R. R., together with renewals and all new work, that the road is in a flourishing condition. In fact every expenditure of every kind, for this year, have been but 43 per cent. of the revenue. The value of wood, wood lots and materials on hand, for future use, and paid for November 30, 1868, was \$105,008 30. The total of ex-

penditures, interest, renewals and loss on the Delaware railroad, has been \$115,352 46 less in 1858 than in 1857. In 1858, every thing has been charged to expenses, including renewals and construction, and all new work, and there has been appropriated to renewals \$60,000, none of which has been expended, so that the net results of the business of 1858 are \$404,152 81, or a surplus more than has been expended and divided of \$124,152 81. The whole amount of damage by accidents to the cars, engines and structures of the road for the year has been only \$661 61, and no passenger has been injured in the slightest degree. The losses and damage paid on a freight business amounting to \$251,542 53, have been only \$560. During the year a new cattle yard at the Bell road, occupying four acres, with a side line 1,300 feet long, and ample pens for the accommodation of a large trade, has been finished. All the bridges and car shops, etc., have been thoroughly repaired.

W. HARVEY'S SAFETY JOINT FOR Coupling the Ends of "T" Rails. PATENTED, NOV. 22, 1858.

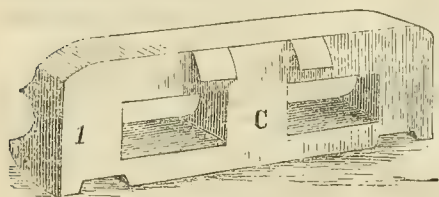


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

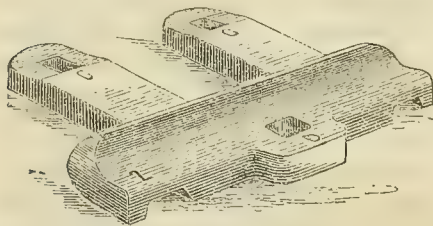
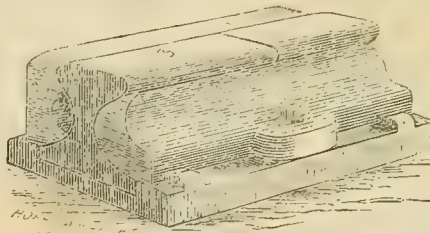


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint tie by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered a just improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT, Cincinnati, O.

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Jan 20-11

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P. DUDELEY,
President of the Board.

Jan. 5 tf.

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Original Lap-welded Iron and Steel Boiler Tubes, laps from end to end.

Paris' Patent Enamelled Iron Pipes and Pumps for water supply, acids, &c. Sole Importers.

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Surface Condensers for high pressure steam with sea or other bad boiler water. Gauges, three cutter Drills, Countersinks, Tube end cutting bars, Expanders, Tube scalers, Steel wire and whalebone brushes, Pull Lever wrenches. Tubes, plain or enamelled, screwed together for artesian wells, Steel for Rollers.

Jan. 5 tf.

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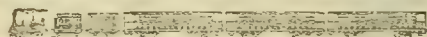
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Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

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Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.
Office, No. 66 West Third Street, Cincinnati, O.
may 13. MOSELEY & CO.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

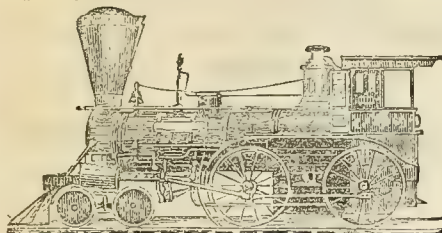
And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap.20 MOORE & RICHARDSON.

1858 1858.

CINCINNATI AND ST. LOUIS.

Through without Change of Cars,

OHIO & MISSISSIPPI

(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M. ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROEBIDGE & CO.,
jan 8 ly 119 Walnut st., Odd Fellows' Building

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express—Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piquette, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & L Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities. Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cressline for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piquette and Sydney; at Sydney with the trains on the B & L Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Drills, Shingle Machines, &c.

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LEE & LEAVITT.

Union Works, Baltimore.

POOLE & HUNT,
Iron Founders & General Machinists,
ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for
Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order.

ANDERSON, GATES & WRIGHT,

STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,

(SUCCESSORS TO JACOB ERNST.)

112, Main Street, Cincinnati

—AND—

SCHEENECTADY

Locomotive Works,

SCHEENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and

improved, and having received extensive additions

to their tools and machinery, are prepared to receive

and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch

and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Supt.

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam.

December 18th, 1855.

D. M. CARHART,

TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address.

Respectfully Yours,

D. M. CARHART,

Box 183 1 Cleveland, Ohio.

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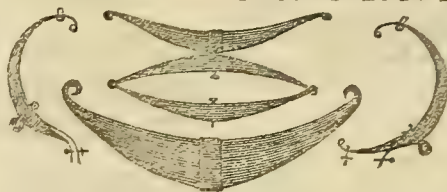
T. F. RANDOLPH & BRO.

Mathematical Instrument Makers

Removed to No. 67 West 6th St.

CINCINNATI O.

MCDANIEL & HORNER, LOCOMOTIVE AND CAR MOTIVE SPRING



MANUFACTURERS, WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

MCDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

Nov 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

G. G. LOBDELL. H. S. McCOMES. D. P. BUSH.

BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.

Railroad Managers will be

interested by an examination of the

"TUBULAR RAIL," patented in Europe and America,

by STEPHENS & JENKINS, Covington, Ky. These rails have

decided advantages over ANY RAIL hitherto made, among them

the following:

The "Tubular Rail" of 50 lbs.

per yard has greater strength and

elasticity, with the same outside

surface as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

its durability superior.

Unlike other new forms of rail, it can be put down

on the same chairs, and with the same fastenings, used

with common T rails.

The arrangements to manufacture are such that these

rails can be furnished of any American or Foreign

make.

Reference is made to the officers of all the railroads

in the vicinity of Cincinnati.

Additional particulars and circulars may be had by

addressing

E. W. STEPHENS,

Cincinnati Ohio.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about

lbs. per yard, "Erie" pattern, of best

quality Welsh make, now ready for de

livery, for sale by

March, 1856.

VOSE, LIVINGSTON & CO.,

19 South William St., N. Y.

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HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent.

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Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING..... JAN 27, 1899.

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THE CINCINNATI, PORTSMOUTH AND OHIO RAILROAD COMPANY.—We understand that a new Company of this name is now organizing. The design is to build a Railroad from Cincinnati to Portsmouth, making the shortest route yet proposed to the East. The principal object, however, is to increase the facilities for transporting coal from Portsmouth, Pomeroy, and the adjacent counties in Ohio and Kentucky, avoiding the present expensive, dangerous, and tedious transportation by flat-boats, and affording constant and hourly communication with the great coal fields of Ohio and Kentucky. We learn that Ex-Governor Clark, of New York, and other prominent eastern capitalists are enlisted in the enterprise.

IMPORTANT TO BANKS AND BANKERS.—“*The Merchants and Bankers' Register for 1859*” has been issued at the office of the *Bankers' Magazine*, N. Y., in one volume octavo, 270 pages, price \$1 25, containing: I. An accurate List of the Banks in every State in the Union; the location and capital of each, names of President and Cashier of each. II. A List of private bankers in every town and city of the U. S. III. The Banks of Canada, and their foreign agents. IV. Directors and Officers of the Bank of England. V. List of Banks in London. VI. A list of three thousand Banks and Private Banks in Europe, Asia, Australia, South America, West Indies, etc. VII. An alphabetical List of Cashiers in the United States. VIII. List of standard works on banking, currency, finance, bills of exchange. IX. The Free Banking Laws of Massachusetts, New York, Illinois, Indiana, Iowa, Louisiana, Michigan, Minnesota, Wisconsin. This is the only work of the kind published in the United States, and furnishes information of the first importance to bankers, merchants, and capitalists, not one of whom can afford to do without it for a single day. Address J. SMITH HOMANS, JR., office *Bankers' Magazine*, New York. Copies mailed to order, free of postage, upon the receipt of the price.

THE TRADE IN CATTLE—EXPORTATION OF OHIO—CONSUMPTION IN NEW YORK.

No man can have observed the course of trade, without observing one great change. This is the mode of transporting animals to market. Formerly they were, all driven on foot, and there were great preparations made for pasturage, and feeding, and resting, which, as may be supposed, required a great deal of land, labor, and money. This is now all done away with. Cattle are no longer driven, but are carried in cars. The pastures, and the feed, are no longer required. They go from Ohio to New York in three days, with a certainty, an accuracy, which gives the Railroads entire command of the whole business. The animals which pass from Ohio to New York, on the Erie and the Central Roads, are given in the transportation of the *Cleveland, Painesville and Ashtabula Railroad*, which, for the past year, were as follows:

Cattle and Horses.....	88,500
Hogs and Sheep.....	99,353

Here are nearly 400,000 live animals carried over one Railroad! But, although this is the main channel of conveyance; yet, nearly as many more pass over the Pennsylvania and Baltimore Roads. Thus, on the Eastern Roads, this traffic is a very large source of revenue.

The exportation of cattle from Ohio amounts to 120,000—exclusive of those made into beef. Of this number 44,000 were sent to the City of New York. In that city the beeves sold amounted to 191,560. This is larger, no doubt, than the number actually consumed; but, we shall be safe to say that the consumption was 150,000. These beeves average about six hundred pounds *net*. The aggregate weight of beef, then, amount to the enormous sum of 90,000,000 lbs.—ninety millions of pounds! The population of New York, including such of its suburbs as market there, is about 700,000. Thus the *average consumption* of each individual is 130 lbs., or a little over *one-third of a pound of beef*, exclusive of other animal food; and we have no doubt such is the fact. The other meat consumed will probably amount to as much more, and bring the *average consumption per day* of animal food to *two-thirds of a pound*. The army ration for a soldier is a *pound per day*. But this, of course, should be a third of a pound over the general average for the whole community, which contains so many small children.

The average price of cattle in New York per head, was \$60 00. This, however, includes about \$10 per head for transportation; so that, the Ohio cattle were worth to this State about \$50 00 per head.

The State of Ohio, therefore, received for cattle in New York, the handsome sum of \$2,200,000.

Illinois sent more cattle to New York,

than Ohio; but, they were worth in Illinois \$10 00 a head less, so that Illinois did not receive as much money for cattle as Ohio, in New York; and, in the aggregate, not near so much—Ohio having sent large numbers to Baltimore.

The number from the different States are as follows, viz:

Ohio.....	43,890
Illinois.....	52,318
New York.....	38,980
Pennsylvania.....	1,660
Indiana.....	11,330
Kentucky.....	9,409
Virginia.....	805
Iowa.....	2,724
Michigan.....	1,682
Texas.....	1,214
Connecticut.....	500
New Jersey.....	603

The new States west of the Mississippi will gradually, as their railroads are developed, begin to supply the Atlantic cities with large amounts of beef. These cities require the enormous number of 500,000 cattle per annum for their own consumption; which will be equal, at New York prices, to \$30,000,000!

We extract from the *New York Tribune* the following interesting account of the Market places for cattle in New York:

For all this enormous trade in live stock the City makes no sort of provision, notwithstanding the hue and cry kept up about the necessity of furnishing “market places”—places to accommodate those who vote at city elections; not those who come here to sell country produce. All the accommodations ever furnished those who bring live stock into the city have been provided by individuals, and the market-places have never had any permanent abiding place. Thirty years ago there was a “Bull’s Head Tavern” in the Bowery, near where the Theater now stands, with four yards for cattle. This place was soon rendered too small by reason of the increased population of the city, which crowded up “Bowery lane;” and so Bull’s Head soon moved out of town, and located on Twenty-fourth street, corner of Third avenue, with sale-yards on the two squares between Twenty-third and Twenty-fifth streets and Third and Lexington avenues. It fluctuated a few years between this location and the corner of Third street and the Bowery, with no sufficient accommodations at either place, and then, because lots had risen to the enormous value of from \$300 to \$500 apiece, the Cattle Market had to march again to a cheaper location. This time it was supposed the location, upon its present site, on Forty-fourth street and Fifth avenue, was so far out of town that it would not be in the way of the march of improvements during the next half century. A lease of what was supposed would be amply sufficient ground was taken in 1844 upon a very low rent for twenty years, by George Allerton, and he and his brothers have expended some \$50,000 in fitting up a market place sufficient for the vast increase of business transacted there at present. Our tables show that over 144,000 head of beeves have been sold there upon the great market days of Tuesday and Wednesday in 1858. The market-place now covers about fourteen acres, divided into about 150 yards, fifteen of them shedded, and the greater portion of them paved and furnished with Croten water. The stables which contain numerous

cattle stalls, for feeding, and pens for sale of sheep and calves, are 250 feet long and 30 to 40 feet wide. This market is capable of yarding 5,000 bullocks, and an equal number of sheep and calves. The first market held here was on the 6th of May, 1845, and the last, without a renewal of the lease, will be six years hence. There is a large brick hotel and other permanent improvements, that will revert to the owner of the soil. All this, those who use the market-place have to pay for, and when the lease of this locality expires, they must go somewhere else and pay for other necessary provisions, because the City furnishes nothing to accommodate those who supply it with this vast amount of food. The principal proprietor at this time of Bull's Head Market-place is A. M. Allerton, jr.

If the City makes no provision for this great business before the present lease expires, it is difficult to say where the market-place will be driven to next, or who can be found to expend so large a sum as will be necessary to supply accommodations equal to those now provided.

Mr. Allerton has, also, lately fitted up at the west end of Fortieth street the best hog market in America. It is a two-story building, and will be, when completed, 100 feet wide and 600 feet long, with upper and lower floor, divided in pens opening upon center alleys, provided with all conveniences for feeding, watering, cleaning, weighing, etc. As the business increases, Mr. Allerton intends to make an addition of single floor, open pens, 100 feet by 600 feet, so as to be able to accommodate twenty or thirty thousand hogs a week.

LETTER FROM W. WRIGHTSON.

CAMP SANTA RITA S. M. Co., }
DRAGOON SPRINGS, Dec. 30, 1858. }

T. WRIGHTSON, Esq.,

Dear Sir:—Finding that it would be impossible amid the varied duties of Train Life, and the thousand and one things requiring my own personal supervision, to make you an early and complete report of the progress of our party, I requested Mr. Turner to copy from his Diary such details as he might deem of interest to the officers of the Company. Herewith please find the report up to El Paso. It is neither as full or minute as I could have wished, but I have no doubt it will be read with interest.

Since my last letter, I regret to report a series of misfortunes which have detained our train. Just previous to our arrival at the Mimbres River, while the train was in motion, we encountered a severe snow storm. The snow fell fourteen inches deep and covered the whole country. The grass was buried up, the animals pinched with cold, and the train brought to a dead stand. After a delay of two days, the snow was sufficiently melted to allow us to proceed, and we moved forward again. But such was the condition of the roads, the scarcity and poorness of the grass, and the inclemency of the weather, that our progress was very slow. The first stop we made after leaving the Mimbres was Bourro Canon, 25½ miles, which we reached

in three days of hard travel. The next was Steen's Peak, 45½ miles, in six days. The general character of the country from the Rio Grand to our present position, is a succession of enormous swells like great waves of the Ocean, on whose summits the mountains are thrown up like the white surges that curl on the summits of the billows. In the valley between Bourro Mountain and Steen's Peak, called on the map El PelonciHo, lays a low level plain, called the Playa, or dry bed of a lake. The soil here is clayey and retentive of water. The crossing of it was the worst part of the journey, and told fearfully on the mules. The poor creatures tugged gallantly through the mud, but completely exhausted their strength, and we were compelled to lay up two days at the Peak to recruit them. From Steen's Peak to Apache Pass was another long descent, and long ascent. Apache Pass is the worst Pass on the whole route, for the rugged character of the hills, the narrowness of the road, the number of Indians, and inclemency of weather. I dreaded that point more than any other, and increased my guards, and otherwise added to precautions around the camp, and around the herd. Yet, in spite of all, we met with a serious loss from a source from which we least expected it—the treachery of our own drivers. In hiring them I was especially careful to hire only those who came well recommended by respectable persons. On the night of the 19th, about ten o'clock, I was out to the herd, the guards were all at their posts, and everything right as far as I could see. I had been out once before on the same watch—at a quarter past ten the guard was changed by myself, and I returned to camp. At eleven I went out again and discovered nothing wrong, and then laid down to sleep, leaving orders to be awakened to change the next guard in a little over two hours. This the camp guard neglected to do, but the herd guard which then came on, awakened me, and reported the absence of four men and the loss of eighteen of our best horses and mules. I immediately aroused the camp, sent out scouts in each direction, and took other measures to ascertain the route taken by the thieves, and arranged a pursuing party to set out on this trail in the morning. The trail was found. The party furnished with rations, and the best animals that were left, and in the morning started on the trail. They have now been gone eleven days, and we have no news from them yet. They have undoubtedly gone to Santa Cruz, believing that the thieves had headed for that place. The party consists of Mr. Hall, our guide, Mr. Cross, Mr. Ridenour, Mr. J. Wrightson, and Mr. Arnold, a gentleman connected with the Mail Company. I hope they will overhaul the runaways, and recover the stock. About the same time we lost our mules, the Mail Company lost twenty-nine mules at Cook's Springs and some more above where we are now camped. White's train lost a man and they do not know what else.

After the excitement of the loss was over, I decided to move a portion of the train to the next mail station, where we would be distant from the Indians, and leave them there and return for the rest, and accordingly started with four wagons and five men, and made the drive, 35¾ miles, in two days; left the wagons and two men, and returned with

loose stock to camp for the rest. We again rested the animals a day, as they had made the drive of 35¾ miles twice without water between stations. From the actions of the drivers with us, I was led to believe that they designed another runaway on our return with the loose stock, and so disposed my men that the least movement towards such a course would have been followed by the instant shooting of every Mexican driver connected with it. Nothing, however, occurred, and we reached camp safely. On our second trip with the remaining six wagons, we encountered a storm of rain, and hail, and snow, accompanied with a cold wind. Traveling under such circumstances is not very pleasant. I took my place with the herd at four in the morning, just as the storm began, and got soundly drenched. At a little past seven, as soon as we could see to hitch up, we moved off. The Playa again was wet and muddy, and the mud as sticky as tar. It was awful hard work for over four miles. I did not get dry till we made our noon camp, where I changed my shoes and stockings, and dried my other clothes by the fire. We reached here in the evening after dark—mules and men tired out. The mules have been feeding all day on the mountain side, and I hope will travel well to-morrow. The next water is eighteen miles distant, at the San Pedro River.

We are now only fifty-five miles from Fort Buchanan, and ninety-five from the mines. We shall do our best to reach the mines at the earliest moment that the mules can make the travel in this inclement weather.

I am sorry to report that Mr. Woodman is sick with inflammatory Rheumatism, but will undoubtedly be better when he can have a few days' rest and comfortable quarters at the Fort.

Tubac has been to us what Rome was to Aeneas, a sort of dim vision in the distant future, destined to be realized only after a series of hardships. It is our fervent aspiration that when these are over we may realize as bright a future as the old Trojan hero did in the foundation of his empire.

With our best respects to the officers of the Company, I am

Truly yours,

W. WRIGHTSON.

P. S.—We have got track of the mules, and hope to recover them in a few weeks.

December 31.

NEW YORK AND ERIE RAILROAD.

MR. MORAN'S REPORT FOR 1858.

The accounts of this Company for the fiscal year ending 30th September, are herewith submitted. In judging the results they present, it must be borne in mind that the past fiscal year has been one of unparalleled trials and difficulties to most of the railroads of the country. It was inaugurated by the financial crisis in October, which caused the suspension, not only of this and so many other Railroad Companies, but also of nearly all the Banks of the Union. The annihilation of credit both here and in Europe, which followed, arrested suddenly all commercial and industrial operations, greatly reducing the traffic of the country, and thereby most injuriously affecting the revenue of all railroads. The agreement between the four great lines of Railroads sustained, for a while, the rates of transportation, notwithstanding the limited amount of traffic offering; but in December last, the competition between the great lines recommenced, producing the usual and inevitable result: a gradual but steady and important reduction in the rates of trans-

portation, further increased on the opening of inland navigation, by the competition of canal forwarders, who were enabled to reduce the rates of transportation unusually low in consequence of the important reduction made in the Canal Tolls. This Company made every possible effort to arrest this ruinous and constantly increasing reduction in the rates of transportation, but without success, and finally, in self-defence, was forced, in June last, to reduce the rates of passenger fares. Thus, a greatly reduced traffic had to be done at unprecedentedly low rates, whilst the condition of the road and equipment, rendered large expenditures imperatively necessary, to restore them to the condition required for the safe and economical administration of the road. The embarrassed finances of the Company were burthened by interest on \$1,750,000 expended in the purchase of lands and the construction of the Tunnel and Docks in Jersey City, whilst the unfinished condition of these valuable improvements prevented the Company from deriving the slightest benefit from them. Numerous old claims and law suits were pressing on the company, which, when adjusted, further burthened its finances. A large portion of the fuel consumed during the year, was of inferior quality, purchased at high prices, so long since, that it had partially decayed, and which had to be removed at considerable expence because lying at points where it could not be used. The use of inside bearing journals, condemned by every practical machinist, rendered it impossible to reduce essentially the expenditure for oil and for repairs of running gear, without first altering the entire equipment of the road. These are some of the reasons why the revenue of the Company is less than it has been since the year 1852-53, whilst the expenditures reach a percentage exceeding that of any previous year.

The gross revenue for the year amounts to	\$5,151,616 43
LESS:—	
Ordinary expenses, including taxes, loss on Propellers chartered, fuel destroyed, etc....	\$3,871,968 69
Extraordinary expenses, doubtful assets, depreciation of wood, filling cascade.....	85,732 60
Construction account.....	24,932 47
	3,982,593 76

Applicable to interest and rent of Union and Chemung Railroads.....	\$1,169,022 67
Whereas, these items amount to.....	1,977,651 23

Leaving a deficit of.....	\$808,628 56
Less profit on bonds purchased for Sinking Fund and interest on bonds held by Sinking Fund.....	117,610 58

Annual deficit on the year's operations....	\$691,017 98
PAID:—	
Interest on funded debt.....	\$1,547,016 55
Do. accounts payable.....	182,143 32
Decrease in materials.....	80,658 94
Do. fuel.....	254,450 82
Do. other assets.....	48,412 06
Do. bills and accounts receivable.....	174,851 08
Total.....	\$2,269,532 67

LESS:—	
Increase in Long Dock.....	\$229,040 78
Do. Cash and Cash items.....	23,249 35
Decrease of bonded debt.....	76,000 00
Do. bills payable.....	1,250,224 56
	1,578,514 69

Total.....	\$2,269,532 67
LESS:—	
Increase in Long Dock.....	\$229,040 78
Do. Cash and Cash items.....	23,249 35
Decrease of bonded debt.....	76,000 00
Do. bills payable.....	1,250,224 56
	1,578,514 69

Increase of liabilities and decrease of assets in the year.....	\$691,017 98
The gross revenue and the expenditures are both increased \$175,595 38, by changing transportation on all material for Company's use. This has been done to attract the attention of employees to this important item. Formerly materials were often transported great distances to effect a saving in first cost, while the expense of transportation far exceeded the nominal saving.	

Do.	bills payable...	<u>1,250,224 56</u>	
			<u>1,578,514 69</u>
Increase of liabilities and decrease of assets			

With a decrease in passengers moved of 23 1/2 per cent., the miles run by passenger trains are only decreased 7 1/2 per cent., as it was impossible to reduce the number of trains below a certain point; and with a decrease of 16 1/2 per cent. in the tonnage moved, the miles run by freight trains show an increase of 2 1/2 per cent.—the through traffic having formed an unusually large portion of the whole.

This result seems discouraging, but under the circumstances what else could have been expected? In the accounts annexed no attempts have been made to present the results in a more favorable light than the facts warrant. In them, as in everything else, the naked truth is laid before you. During the whole year the future has in no case been sacrificed to the present. On every occasion the difficulties, as they arose, were fully met and firmly grappled with, instead of being set aside and deferred to some future day to return with greater intensity. Whilst all possible efforts have been made to reduce the expenditures, it has been kept constantly in mind that true economy required that the road and equipment should be in the highest possible condition; since a railroad, like any other machinery, can only be worked advantageously and economically when in perfect condition. With this view, notwithstanding the embarrassed condition of the finances of the Company, the filling of the chasm at Cascade Bridge has been commenced—the road-bed has been greatly improved, particularly by ballasting many portions of the road not heretofore ballasted—a large number of new ties, placed much closer than originally, and a large amount of new rails of superior quality, manufactured expressly for this Company, have been laid in the track. By reference to the detailed statement it will be seen that the expenditures were

Repairs of Track.....	1856-1857.	1857-1858.	Incr.
Do. bridges.....	\$76,436 54	\$936,546 55	21
Do. stations &c.....	46,066 23	84,300 35	83
Do. cars.....	34,682 09	40,972 46	18
Damages for injuries to persons.....	392,271 21	471,122 27	20
	15,225 77	33,975 12	123* Dec.
Office and Station expenses.....	414,965 04	333,466 64	19
Cost of running.....	1,131,472 67	987,926 55	13
General expenses, loss and damage of goods and baggage and contingencies.....	225,025 24	213,860 64	19
Repairs of engines and tenders, tools and machinery in shops.....	489,815 09	419,151 83	14 1/2
Incidental and miscellaneous expenses.....	288,822 94	207,678 58	28
	\$3,844,812 82	\$3,729,200 99	

The decrease in the expenditure for the administration of the Company and its traffic is \$47,816 74, whilst in the repairs of the track and roadway, bridges and cars, which maintain or increase the value of the property of the Company, there has been an increase of \$283,455 56 over the already large expenditures of the previous year for the same object. The large expenditures for the two past years on the road-bed and equipment, prove conclusively the folly of attempting to economize by deferring the repairs of these important departments. For every dollar economized by such means, several dollars have to be expended ere long. Of the extraordinary expenditures, \$16,909 74 are for Cascade embankment; \$22,287 82 for depreciation on old wood remaining on hand on the 30th September; \$39,153-54 doubtful assets previous to 1857. All the extraordinary expenditures, as well as those strictly belonging to the construction account, have been deducted from the gross revenue of the year, and thus form part of the deficit. At no previous period have so few unadjusted claims been outstanding against the Company. The reduction in the working expenses are far from being so great as they should be, but it must be remembered that a system which has existed, for years, can not be altered at once. In the course of the present fiscal year, the road and equipment will be further improved, which will greatly contribute to reduce permanently the working expenses.

During the past year experiments have been made to substitute coal for wood, with satisfactory results, and ere long coal will no doubt, be generally consumed, with an important saving to the Company.

The entire indebtedness of the Company was—

	Sept. 30, 1857.	Sept. 30, 1858.
Funded debt.....	\$24,891,000 00	\$26,438,016 53
Bills payable.....	1,982,482 42	732,257 86

Accounts payable, including past due coupons, less cash and cash items, and accounts receivable.....	342,934 24	678,678 39
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Less bonds in sinking fund.....	1,386,000 00	1,462,000 00
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Total indebtedness.....	\$25,830,416 76	\$26,786,952 80
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The acceptances endorsed by D. Drew, Esq., have been reduced from \$1,500,000 to \$314,283 46.

The earnest and repeated appeals made to you to extricate the Company from its embarrassments, resulted in securing to the Company only \$2,555 1/2 although \$2,000 of fourth mortgage bonds were offered for every 1,000 advanced. This indifference to the welfare of the Company, on the part of those most directly interested, was most encouraging to the Directors and officers, and left them to struggle through the difficulties without other assistance than the subscriptions to the fourth mortgage bonds. My visit to England last winter secured subscriptions to the new loan of \$1,500,000, which, with those obtained here, have been of great advantage to the

Company, by reducing the floating debt which pressed so heavily on its finances. Up to the 30th September last, only 3,020,000 of the new loan had, as yet, been issued. It is really surprising that the unsecured bond-holders have not availed themselves more promptly of the undoubted advantages offered them by the new loan. Out of 10,000,000 unsecured bonds, in the hands of the public, 3,000,000 were offered the privilege of conversion into fourth mortgage bonds, and \$3,000,000 into fifth mortgage bonds, on condition of paying \$3,000,000 in cash or indebtedness of the Company, in exchange for fourth mortgage bonds at par. The fourth mortgage bonds offer ample security in any event, the entire issue of bonds under the four mortgages, is limited to \$19,000,000, the annual interest on which is so moderate in amount, that there can be no doubt of the ability of the Company to earn it under any possible circumstances.

The second mortgage bonds of this Company, amounting to \$4,000,000, mature on the 1st March next. In the present condition of the finances of the Company, it is out of the question to reimburse on that day, but as these bonds are most amply secured, it is proposed to allow the holders to retain all their present rights, as in the case of any other real estate mortgage past due, and to continue to pay them the interest promptly as it matures, on the first days of March and September, until such time as means can be provided to reimburse them, which will be done at the earliest possible moment. This course will entail no sacrifice on the Company, or on the holders of these bonds, for the latter, in the present condition of the money markets of the world, would find it impossible to reinvest their capital, in securities at par, offering equal security and productiveness. The entire amount of the two first mortgages is only \$7,000,000, for which is pledged property which has cost over 38,000,000. It certainly can not be the interest of any of the creditors of this Company to involve it in litigation, which thus far it has fortunately escaped, as this would at once reduce the market value of its securities, and eventually render many of them, as well as the stock entirely worthless. A temporary advance to the Company, at the present moment, of five per cent. on your shares, would assure the prompt completion of the tunnel and docks at Jersey City, and probably add ten per cent. to the market value of the shares and bonds of the company, as the facilities for the transportation of merchandise and produce to and from the West, which these improvements will offer, would greatly increase the traffic of the Company, and enable it to meet all its engagements. I can not press too strongly on you the importance of promptly finishing these works. If they be allowed to linger in their present unfinished state, both yourselves and the unsecured bond-holders will be greatly and, possibly, irreparably injured. The Directors and Officers of your Company will continue their efforts to extricate it from its embarrassments, but the success of their efforts, if unaided by you or other parties in interest, will depend upon circumstances beyond their control. With the improvements in Jersey City completed, and the road and equipment in proper condition, any ordinary year's traffic will enable the Company to meet all its engagements, and to take that prominence which the magnitude of the work and its geographical position clearly indicate as the future.

CHARLES MORAN, President.

New York Dec. 30, 1858.
Transportation for the year ending September 30, 1858.

EARNINGS.	Total
From freight.....	\$3,843,310 77
From passengers.....	1,182,258 27
From storage.....	1,929 34
From telegraph.....	9,645 77
From rents.....	15,851 55
From hire of cars.....	3,934 73
From mails.....	94,686 00

Total earnings.....	\$5,151,616 43
Expenses, including taxes.....	2,791,457 52

Net earnings.....	\$1,560,158 91
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TRANSPORTATION EXPENSES.

Distribution of account. Year Ending Sept. 30, 1858.

Office and Station Expenses:—

Office expenses and stationery.....	\$1,866 12
Agents and clerks.....	146,600 83
Labor, loading and unloading.....	145,499 69

Cost of Running:—

Porters, watchmen and switchmen.....	53,359 64
Wood and water station attendance.....	8,984 58
Fuel, first cost and labor.....	471,440 34
Passenger conductors, baggage and brakemen.....	67,149 29
Freight conductors and brakemen.....	113,283 40
Passenger engine-men and firemen.....	68,462 95
Freight do. do.....	121,663 55
Oil and waste for passenger engine and tender.....	19,557 92
Do. for freight engine and tender.....	36,392 73
Do. passenger and baggage cars.....	3,665 87
Do. freight cars.....	24,026 28

General Expenses:—

Loss and damage of goods and baggage.....	34,347 92
Damages for injuries to persons.....	23,976 12
Do. to property.....	3,194 28
General superintendence.....	69,051 92
Contingencies.....	107,363 52

Repairs of Engines and Cars:—

Engines and tender, passenger.....	120,519 42
Do. freight.....	238,114 33
Passenger and baggage cars.....	140,771 62
Freight cars.....	330,351 25
Tools and machinery in shops.....	30,189 53
Incidental expenses about shops.....	32,328 55

Repairs of Track and Roadway:—

Road-bed.....	81,491 27
Track.....	838,347 91
Fences, gates, etc.....	10,707 37

* The consequence of the unfortunate accident at Shin Hollow, which threw two cars down an embankment.

<i>Repairs of Structures:—</i>		
Truss bridges.....	84,300 75	
Passenger, wood and water stations.....	29,764 41	
Engine and car house, machine and work-shops.....	10,409 92	
Rents (dwellings).....	798 23	
<i>Incidental:—</i>		
Superintendence and office expenses.....	892 50	
Taxes.....	62,259 63	
Contingencies.....	10,665 76	
<i>Miscellaneous:—</i>		
Ferry.....	103,115 35	
Expenses of operating telegraph.....	44,749 74	
Express expenses.....	48,525 23	

Total.....\$3,791,457 52
Comparative Statement of Balances of General Ledger, Sept. 30, 1857, and Sept. 30, 1858.

CREDITS.		Sept. 30, 1857.	Sept. 30, 1858.
Capital stock issued.....	\$11,000,000 00	\$11,000,000 00	
Funded debt.....	24,891,060 00	26,438,016 55	
Bills payable.....	1,892,482 42	732,357 86	
Accounts payable.....	721,639 88	908,812 20	
Profit and loss.....	483,316 16		

Total.....	\$39,081,468 46	\$39,079,086 81	
Increase.			
Funded debt.....	\$1,547,016 55		
Bills payable.....		\$1,230,224 56	
Accounts payable.....	184,142 32		
Profit and Loss.....		483,316 16	

Total.....	\$2,381 85		
Decrease.			

DEBITS.		Sept. 30, 1857.	Sept. 30, 1858.
Construction.....	\$34,033,680 16	\$34,052,632 63	

Union Railroad improve-ment.....	435,643 77	435,613 77	
Cash and cash items.....	21,467 71	44,717 06	
Materials.....	547,336 05	466,677 11	
Fuel.....	572,371 70	317,920 88	
Long Dock Company.....	744,049 30	973,083 08	
Other assets.....	372,773 07	324,360 11	
Bills and accounts re-ceiveable.....	360,267 83	185,416 65	
Discount on bonds, 1875.....	607,885 87	592,615 29	
Sinking fund.....	1,386,000 00	1,462,000 00	
Profit and loss.....		198,019 93	

Total.....	\$39,081,468 46	\$39,079,086 81	
Increase.			

Construction.....	\$24,952 47		
Cash and cash items.....	23,249 35		
Materials.....		\$60,658 94	
Fuel.....		254,450 82	
Long Dock Company.....	249,040 78		
Other assets.....		48,412 96	
Bills and accounts re-ceiveable.....		174,851 08	
Discount on bonds, 1875.....		15,270 58	
Sinking fund.....	76,000 00		
Profit and loss.....	198,019 96		

Total.....	\$2,381 85		
Decrease.			

Balances of General Ledger, September 30, 1858.

Construction.....	\$34,052,632 63		
Union Railroad Improvement.....	435,643 77		

Cash and Cash items on hand.....	\$44,717 06		
Materials on hand.....	466,677 11		
Fuel on hand.....	317,920 88		

Total.....	\$849,315 05		
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Owners of Lake Erie pro-pellers.....	\$170,013 12		
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Owners of Lake Erie steamers.....	40,000 00		
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Rolling stock, etc., bought of Can. and Nigara Falls R. R. Company.....	100,000 00		
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Real estate.....	4,496 32		
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Bonds Quincy & Toledo R. R.....	500 00		
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Bonds Buffalo, C. and New York R.R.....	9,000 00		
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Bonds of the City of To-le-do.....	100 00		
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Discount on bonds due 1875.....	592,615 29		
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Sinking Fund.....	1,462,000 00		
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Long Dock Company.....	973,083 08		
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Rolls and accounts receivable.....	185,667 42		
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Profit and loss.....	198,019 93		
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Total.....	\$39,079,086 81		
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Capital stock issued, including dividend No. 6.....	\$11,000,000 00		
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First mortgage bonds, due 1877.....	\$3,000,000 00		
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Second mortgage bonds, due 1859.....	4,000,000 00		
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Third mortgage bonds, due 1881.....	6,000,000 00		
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Fourth mortgage bonds, due 1880.....	3,020,511 55		
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Fifth mortgage bonds, due 1868.....	1,500 00		
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Convertible bonds, due 1871.....	\$3,423,000 00		
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Do. due 1862.....	3,001,000 00		
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Sinking Fund bonds, due 1875.....	3,995,500 00		
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Acceptances, due 1860.....	40,000 00		
Seven per cent. certifi-cates.....	26,515 00		
Bills payable.....	732,357 86		
Accounts payable.....	489,702 20		
Unpaid interest on mort-gage bonds.....	159,425 00		
Unpaid interest on unse-cured bonds.....	268,625 00		
Total.....	\$1,767,575 06		

Total.....\$39,079,086 81

ILLINOIS CENTRAL RAILROAD.

LONDON, Dec. 18, 1858.

The report of the late deputation appointed by the London committee of shareholders of the Illinois Central Railroad has been made public. It has had the effect to depress the share market to a greater degree than for some time past; for the reason that the conclusions of the deputation do not seem to be sustained by the facts of the case. This is the second deputation that has gone out and reported during the year. In the first place an auditor was sent out to examine the books and accounts of the Company. These and the bills receivable for lands he examined minutely, and, as might have been expected, found them to be correct. The report specified certain improvements as desirable in the management. As to the railroad, there was not considered any cause for uneasiness. The prospect of its future connections were subjects for congratulation. It was the opinion of the gentleman making the report, "that it requires no times of extraordinary prosperity to place this undertaking again in the highest position it has ever occupied in the estimation of those who have undertaken to sustain and carry it out, but it did not afford sufficient data for estimating its future prospects." The report spoke of the duties of the several officers; gives a full description of the condition of the road; specified the arrangements with other companies; describes the general character of the traffic; testified to the actual defacement of the bonds canceled by purchase from proceeds of sales of lands, and added some interesting information of the sales; and also gave a statement of the liabilities and assets of the Company on the 1st May, 1858. But it did not show the amount of bills overdue; and the times at which those coming due would arrive at maturity; nor did it specify what lands remain unsold on the several sections of the road. The consequence was, the report was not considered satisfactory, and the market gave way under the continuous pressure of sales; it was consequently determined to seek for more information, more particularly as the call of \$20 per share so closely followed the report.

The second report does not clear up the position of the land department, or explain the present financial position of the road; it is rather an estimate of future success; and in estimating the future, the maturing assets in the land department are not fully taken into account. "The probabilities of payment" are treated in a most indefinite manner, and the abundance of "croakers" are not favored with any special information. The report says: "Once free from debt, we suppose it will be kept so;" but it does not show how much is necessary for the purpose, and to put the road into thorough order.

As another year is fast closing, and the report for 1858 will soon be due, it may be interesting to take a cursory view of the position of the Company, so far as it has been made known to the public, and to show in as simple a form as possible, the receipts

and expenditures of the Company, with its liabilities and assets.

The capital with which the Company's account stands debited on the 1st Jan., 1857, amounted to.....\$2,575,235 57
 The net receipts from traffic &c., were.....1,767,575 06
 The receipts from land department were.....1,252,216 06
 The undischarged liabilities.....2,596,159 53

To Dr. of account.....\$34,177,737 50
 The expenditure upon construction account on the 1st Jan., 1858, amounted to.....27,437,669 91
 or \$33,435 per mile.

The loss upon negotiating securities.....2,578,850 08
 Prepayment of optional right scrip.....62,500 00
 Payment of interest upon bonds and stock.....630,361 49
 Expenses of land department.....199,013 83
 Assets of the Company.....1,499,136 34

To Cr. of account.....\$34,177,737 50

The report of the deputation says it was assumed that if the optional right bonds created last autumn had been all taken, the proceeds thereof would have cleared the Company of debt up to the date of the report; but as the bonds were superseded by the call of \$20 per share, realizing in all \$3,500,000, this sum would be sufficient to discharge the debts and accrued interest, if the assets realized their estimated value—the statement of assets on the 1st May, 1858, as stated in Mr. Fisher's report, being the estimate referred to.

The share capital of the Company is 255,000 shares, of \$100 each, but on the 1st January, 1857, only 174,964½ shares had been issued; and as in March last the Company's shares commanded par in the market, and the Company was in want of money, it is probable that the greater part of the unissued shares had been disposed of, particularly as on the 1st May only 1,046 shares are included as assets belonging to the Company. Independently, therefore, of any of the assets, the Company would realize \$60 per share upon 78,988½ shares, and \$20 on 174,964½ shares, less the \$30 call per share, unpaid. If this were the case, over \$8,000,000 would have been realized by the Company. Yet, unable to account for the non-issue of shares in hand, when the Company was in want of money, it seems more credible that the call in hand was upon the 174,964½ shares issued on the 1st January, 1857. Yet why 50,000 shares should remain unissued, when the Company would obtain over \$4,500,000 by their issue, supposing the market in March last could have taken them, neither the report of the auditor or that of the deputation explained.

The estimates for the future are unsatisfactory, and what is given does not bear the impress of any great research. From the report of former years we find, without personal inquiry, that the expenditure on account of construction is about \$2,000,000 per annum, and that the working charges of the road are increasing; that the net revenue of last year would not have been anything at all, but that the stock of wood, coal, and necessities for working the line were treated as a cash asset, yet the interest paid during the year amounted to \$1,897,517. In what way is this continuous drain to be met? Only from the sale of the lands, and the increase of traffic.

To enable persons interested in this Company to ascertain the value of their property, we require more information. We want to know what portion of the road intersects good lands, and where those lands which will not sell are situated. In this the Company's report give more information than either of the special reports, only it requires some trouble to obtain it, for the boundaries are somewhat indistinct. Taking them by your railroad

map, we divide the road into 10 sections, Nos. 1 to 5, including that portion of the road between Dunkirk and Sandoval, a distance of 336 miles. Nos. 6 to 9 includes the sections on the Chicago branch, and No. 10, from Sandoval to Cairo, 118 miles.

Section No. 1 is supposed to have 330,240 acres of land, and on the 1st January this year, there has been 264,281 acres sold, or about 80 per cent. This division of 103 miles forwarded 74,557,483 lbs. of freight in 1856, and increased its traffic in 1857, 19,712,685 lbs.

Sec. No. 2 is supposed to have 241,921 acres of land, and to have sold 175,191 acres on the 1st January, 1858, having sold about 72 per cent. It has 64 miles of railroad, and forwarded in 1856, the large amount of 108,163,378 lbs. of freight, increasing its traffic by 52,716,604 lbs. in 1857.

Sec. No. 3 is supposed to have 318,720 acres of land, and to have sold 1st January, 1858, 217,996 acres, or about 68 per cent. This section of 82 miles forwarded 77,078,957 lbs. of freight in 1856, but in 1857, only 73,540,680 lbs.

Sec. No. 4 is supposed to have 126,720 acres, and to have sold only 67,858 acres on 1st Jan. last, or 53 per cent. This section of 33 miles has also greatly fallen off in its goods and traffic of 1857—traffic showing a decrease of more than one-third.

Sec. No. 5 is that uniting the main line with the Chicago branch, and how, although the sales of land are small, the traffic is not unnaturally increased, for the union with the branch main line would promote traffic. This section has 54 miles of railroad, and the land appropriated is 207,360 acres; only 75,701 acres having been sold on the 1st Jan. last. The freight forwarded was, in 1856, 20,049,566 lbs., and in 1857, 25,726,603 lbs.

Upon the Chicago branch, section No. 6 is supposed to have 161,280 acres of land, and to have sold 69,959 acres. This section of 46 miles has probably its lands reserved for some specific purpose, for only 43 per cent. is sold, and yet the increase of business is large, and the freights forwarded in 1856 amounted to 152,046,652, and in 1857 to 169,680,547 lbs.

Sec. No. 7 shows a decrease in freight forwarded in 1857, of 11,290,368 lbs. as compared with 1856, when 89,880,007 lbs. was forwarded. This section has 62 miles of railroad, and has sold only 28 per cent. of its lands.

Sec. No. 8 has very much improved since 1856, having forwarded in 1857, 52,799,260 lbs. of freight against 10,104,801 lbs. in 1856, and it is the only section in the Chicago branch which had an increased export of wheat in 1857. It has 34 miles of railroad, and is supposed to have 126,620 acres of land, of which 46,845 had been sold on the 1st January last.

Sec. No. 9 unites with the main line, has 80 miles of railroad, and 311,040 acres of land, of which 45 per cent. had been sold. It had forwarded only 52,699,264 lbs. of freight in 1857, but that was 6,994,223 lbs. more freight than in 1856.

The last section, No. 10, having 118 miles of railroad, seems to be the great drawback to the Company, so far as the sale of lands is concerned, for notwithstanding that it embraces the coal and stone district, the sales of land have been only about 15 per cent. During the past year there was an increased movement in wheat, but a falling off in corn. Yet the general traffic improved; the freight

forwarded in 1856 being 81,183,723 lbs., and in 1855, 99,369,354 lbs.

Time will not permit, at present, of entering into the prospects of the success of the land sales, but it is pretty evident that over \$2,500,000 of notes should be payable on or before the 1st January, 1859, and we know that up to the 31st October, the amount of bonds cancelled is only \$981,500. Surely we should have some little insight into the accounts, and not kept altogether in the dark. Estimate upon estimate is falsified by experience, and yet if the majority of the statements which from time to time have been published by authority are correct, the Company should have its shares at par, rather than at the present price; for it has only to get rid of its debts by realizing land sales, or anticipating them, and wait the development of the traffic, which is fast increasing, and might be improved upon many sections of the line.

I am yours, etc., WM. LANCE.

The position of this Company may be stated in a very few words.

There are two elements upon which the success of this enterprise depends—value of the Company's lands, and the income to be derived from the road.

The lands are of the most fertile description. Population is only required to give them value. There is always an uniform ratio between the market value of lands and the number of people living upon them. With a ratio of ten to the square mile, we may estimate the lands to be worth \$2 50 per acre. With twenty inhabitants to the mile, the value of lands increase in much greater than a direct ratio. With a population of one hundred to the square mile in any state, good farming lands would be worth more than \$100 per acre.

The State of Illinois has an area of 57,000 square miles, and a population of 1,500,000, or 26 to the square mile. The increase in population from 1850 to 1855 was 91,000 annually, the whole number at the latter date being 1,306,000. Since 1856 the ratio of increase has been much less than for the six previous years; the check, however, is only temporary. There can be no doubt that the State will continue for an indefinite period to increase at the ratio of 57,000 annually, or at the rate of one person to each square mile of area.

Now there is no doubt that the increase in the value of lands will be in much greater ratio than the increase in population. Could we get at the exact present value of the lands now owned by the Company, we could calculate with a good deal of precision their future value, assuming a given rate of increase in population.

The non-payment of notes given for lands is no competent evidence against the value of the lands for which they were given. They have for the most part been purchased by parties having small means, who expect to pay for them out of the crops raised; these, for the present year, have been very deficient in quantity and quality. What has been raised, hardly pays the cost of transportation to market. All Western Railroads, consequently, are without their usual amount of traffic. This depression is, however, merely temporary. We think there can be little doubt that in the end the Company will realize the prices at which their lands have been sold.

The great drawback to success are the large demands upon the Company for interest

on its funded debt, which is not met by the income from the road. What this is to be, is at present a matter of conjecture. It will, without doubt, rapidly increase, and in much greater ratio than the progress of population. A very large addition is anticipated from the opening of railroads now in progress of construction from Cairo to New Orleans and Mobile, and which will soon be completed. The opening of these will largely increase the earnings of the Illinois Central.

In the present exigency there is only one course that can properly be taken to reduce expenses to the lowest figure possible and wait for more prosperous times, and new connections to develop to the fullest extent the business of the road. In the meantime, further calls upon the stock will have to be made, but to what extent the future only can determine.

CHESTER VALLEY RAILROAD.

The Annual meeting of the Stockholders of the Chester Valley Railroad Company was held at the Exchange, yesterday afternoon. At the time fixed for the meeting, two gentlemen were nominated for Chairmen, and some confusion ensued. At the suggestion of Mr. Badger, there was a division. The friends of Mr. James B. Smith, (the Reading party) taking the southern end of the room, and the friends of Mr. Samuel Hart (the Germantown side) taking the opposite extremity of the apartment. The choice fell upon Mr. Smith. Mr. Charles O'Neill was chosen to act as Secretary of the meeting.

The minutes of the last Annual Meeting were read by the Secretary. They were approved.

The annual report of the President and Directors was read. It sets out with the announcement that the payment of the interest on the bonds has commenced, and the first coupon has been paid off in full, with the exception of a trifling balance which remains to be distributed. It is hoped that another coupon will be paid during the first half of the present year. Other payments, it is believed, will be paid at shorter intervals, as the new arrangement for making the road shall have had a reasonable time to mature.

The gross receipts for 1858, were.....	\$30,067 11
Running expenses.....	1,768 40

Net receipts for 1858.....\$11,298 71

This is an increase in the net receipts, during the year, of 43½ per cent., and an increase over the average of all former years, since the road has been in operation, of 97 per cent.

The net revenue continues to be strictly appropriated to the payment of the interest on the bonds, according to the order of the United States Circuit Court, except the salaries of the Secretary and Treasurer.

The tonnage on merchandise, lime, and iron ore has increased at the rate of 18 per cent. over the tonnage of the same articles in 1857.

The freight for coal has not increased in the same proportion, the per centage over that of 1857 not exceeding seven per cent.

The number of passengers carried over the road in 1858 amounts to 39,712, being an increase of more than 20 per cent. over the number for 1857. The excess for the year, over 1857, being 6,592 passengers.

The report goes, at great length, into the subject of the recent lease of the road to the Reading Railroad Company, and urges that the President and the Board have done not

only what they believed to be best for the interests of the Chester Valley Railroad Company, but what they still believe will be most conducive to the welfare of the Company.

Mr. Rush, after reading the report, read a statement of the freight over the road, for the week just passed; 839 $\frac{3}{4}$ tons of freight had been carried over the road, an increase of 50 per cent. on the corresponding period of 1857.

A motion was made to print 500 copies of the report. Mr. Rogers objected to incurring needless expense, as he thought that the order of the Court as to the disposition of the revenue of the road would forbid it. The motion prevailed. The meeting then, on motion, took a recess until three o'clock, to go into an election for Directors. The following named gentlemen were appointed judges of the election:—Wm. Badger, Thos. Evans, Jr., and John C. McGinnis.

The following circular was distributed among the stockholders with the ticket which follow it:—

TO THE STOCKHOLDERS OF THE CHESTER VALLEY RAILROAD CO.

The following considerations are urged in support of the enclosed ticket at the approaching election:

First.—We approve of the action of the Board of managers of the Chester Valley Railroad Company in the recent letting of the road to the Reading Company, and are satisfied that the best interests of the former have been secured by connection with the latter, and the President and Directors have our undiminished confidence.

Second.—We prefer that our road should be worked by the Reading Company, because their outlets to market for the freight passing over our road are superior to those of the Company which has heretofore operated it, and because it is better able to make inland connections with our road, which will serve as feeders of both freight and passengers; besides affording us the great advantage of a direct communication with tide-water at Richmond by locomotive power; an advantage we have heretofore never had.

Third.—We are persuaded for these and other reasons that the business belonging to our road has never yet been properly developed, and that it is capable of much greater development.

Fourth.—Since the road has been leased to the Reading Company, it is important that our Board should be composed of those who will assist the working Company, rather than interpose impediments which a hostile Board might endeavor to do, in order to verify their predictions.

Trusting that your views may correspond with ours, we invite you to unite with us in sustaining the measures commenced, voting the enclosed ticket.

NOTE.—The Election will be held at the Exchange, on the 10th inst., 12 $\frac{1}{2}$ o'clock—room No. 24. MANY STOCKHOLDERS.

President—Benj. Rush; *Directors*—George W. Carpenter, Moncure Robinson, Geo. W. Taylor, George L. Buzby, George W. Richards, Coffin Colket, Geo. W. Carpenter, Jr.

The following ticket was also electioneered and elected:

President—John F. Gilpin; *Directors*—Geo. W. Carpenter, Wm. H. Holstein, Sam. Hart, Coffin Colket, Stephen Coulter, Joseph W. Ryerss, L. E. Corson.

PENNSYLVANIA PUBLIC WORKS.

THE REPORT OF THE CANAL COMMISSIONERS.

We are indebted to an attentive friend at Harrisburgh, for a copy of the Annual Report of the Canal Commissioners. It is too long to give in detail, but the following extracts deserve perusal. The act for the sale of the public works is alluded to, and the Commissioners make this statement:—

By the report of the Auditor General, it appears that the total cost of construction of the lines in operation, up to November 30, 1857, was as follows:

Delaware division of canal.....	\$1,543,762 83
Susquehanna division of canal.....	897, 60 52
North Branch, Wyoming line.....	1,632,117 04
West Branch, Lycoming line.....	1,833,183 20

Lines in operation.....\$5,897,223 67

The receipts for seven years were.....	\$4,369,261 38
Expenditures as above given.....	1,505,488 03
Deduct amount disbursed for enlargement of Delaware division, etc., which amount is included in the foregoing statement of cost of construction.....	203,303 56
	1,302,183 37

Net profits for the seven years.....\$3,067,078 01

Equal to an annual interest of near seven and a half per cent. on the cost of construction, or on twelve and a half per cent. annually on the \$3,500,000 for which the works were sold.

Again: The Auditor General states in his report the cost of constructing of all these canals to be as follows:

Lines in operation as above.....	\$5,897,223 67
Unfinished lines:	
North Branch extension, (Tunkhannock and Tioga lines).....	\$4,643,491 12
West Branch Extension, (Tangascootac and Sinnemahoning lines).....	253,574 78
	4,997,065 90
Total.....	\$10,894,289 57

In this statement of the cost of construction, is included the cost of the unfinished Upper North Branch Canal, and of the portions of the West Branch extension abandoned years ago. The Upper North Branch would have been completed, and in navigable order, during the year, and there can be no doubt that, in a very short time, it would have yielded a profitable dividend on the investment. But waiving the impropriety of taking the cost of an unfinished work into the calculation of the actual profits derived from the revenues on these finished works, it appears from the foregoing statements, that the receipts over expenditures on the finished lines for seven years, amounted to \$3,067,078 01, being an interest of over four per cent. per annum on \$10,894,289, the cost of construction of both the finished and unfinished lines, and, as before observed, of twelve and a half per cent. per annum on the \$3,500,000 for which they were sold, and on which the Sunbury and Erie Railroad Company pay but five per cent. If the portion of the tolls due to the forty-five miles of the Eastern division, extending from Duncan's Island to Columbia, be deducted from this statement, together with the amount charged to the cost of construction for the long abandoned portions of the West Branch division, the aggregate results arrived at will not be materially affected.

Entertaining these views of the financial operations of the law, and having been advised by eminent counsel of its unconstitutionality, the Board unanimously directed the

question to be tested. Before, however, the case was fully prepared, the Sunbury and Erie Railroad instituted proceedings in the Supreme Court against Lewis Cooper, to compel the specific performance of a contract which he had entered into with the company, for the purchase of certain bonds of the Delaware division canal company, the vendee of the Sunbury and Erie Railroad Company, with which contract Mr. Cooper refused to comply, on the ground of the presumed unconstitutionality of the law authorizing the sale. As the points involved in this suit were similar in character to those which the Canal Commissioners intended to bring to the attention of the court, the counsel of the Board was directed, if they thought it expedient, to appear on behalf of the Board, provided that in so doing, the case and the interests of the Commonwealth were not thereby prejudiced. The case came up at Sunbury, in October last, and after argument, the Judges who heard the case, directed a decree to be entered at *Nisi Prius* against Mr. Cooper, with a right to appeal to the court in banc. No appeal has yet been taken, nor has any new bill been filed by the Commonwealth. Whether it is proper or not, at the present time to do either, is a question not yet decided. The counsel employed on the part of the Commonwealth, have expressed their decided conviction, in which the Board concur, that nothing has yet been done which can bar the rights of the State.

It is enjoined by law upon the Board to report their proceedings to the Legislature. In doing so, in this case, they have given the reasons which governed their action in the premises, as briefly and as fairly as it is possible for them to do.

A few words on another subject which the Board deem it their duty to note, will close this report.

If the sale of the canals to the Sunbury and Erie Railroad Company is considered a fixed fact, then the Commonwealth has parted with all her public works, constructed at an aggregate cost of about thirty-five millions of dollars.

To represent these improvements, erected at such a large cost, the State has the bonds of the Pennsylvania Railroad Company, the bonds of the Sunbury and Erie Railroad Company, and the tonnage tax, as sources of revenue towards meeting the interest and liquidating the debt, to which purposes the works and their proceeds had been pledged.

The Board include the tonnage tax, because it was the consideration for the depreciation in the value of the State improvements caused by the construction of competing company works, and it stands now as it was originally understood and intended to be, a compensation to the State for that depreciation. To repeal it, or release it without a fair consideration, would be to fasten upon the people an amount of the public debt which, in justice, should be met by this tax.

It is but due to the Commonwealth and her citizens, that all these sources of revenue be held sacred for the objects to which the works which they represent, and the revenues therefrom, were pledged. If one be relinquished, or released without full consideration to the State, it is to be feared that such act would prove the precursor of the relinquishment of the others.

All of which is respectfully submitted,

A. PLUMER,
GEORGE SCOTT,
N. STRICKLAND.

SOUTHERN PACIFIC RAILROAD.

At the recent convention in New Orleans of the stockholders of this road, Hon. T. Butler King made a very able speech which we see published in the *Picayune*, in which he gives a full, though condensed history of all his labors to consummate that great enterprise on or near the parallel of 32 degrees. It is apparent from the account given, and from what was indeed before known to the public, that Mr. King has labored zealously for many years to consummate this project, the financial basis and many other features of which were such as we never could approve, and consequently we have never expected any further actual construction by that company, than what was barely sufficient to save this charter from forfeiture, and, in fact, it would have been forfeited long since, but for the Legislative relief that has been obtained by extraordinary and most persevering efforts. Mr. King speaks of the efforts he made when a member of Congress some fourteen years ago, to call the public attention to the importance of this road on the Southern parallel of 32°—of his subsequent labors in conjunction with Robert J. Walker, to secure the contract with our State Government, under the Pacific Railroad Act granting twenty sections to the mile—of the rejection by Gov. Pease of the \$300,000 deposit offered first in certain bank notes, and afterwards in certain mining stock—of their thereby being compelled to abandon the twenty section charter and fall back on the Texas Western Railroad charter, which they had taken the precaution to secure—of the various difficulties they have had to contend with under this charter down to the present time—of their having forfeited this charter, and having procured the passage of a relief bill by a two-thirds vote over the Governor's veto, etc., etc. For all his labors he received as compensation, \$200,000 in the stock of the company, and as he asks very suggestively, whether any body else would be willing to perform the same labor for a less compensation. The fact is, Col. King seems to us to have performed nearly all the labor that has been performed. His exertions have been most indefatigable for many years, and but for him the charter would have been long since forfeited and the company defunct. To what extent those labors have contributed to promote the best interests of the country, our readers have heretofore had some opportunity of judging, and it remains to be seen whether future developments will change that judgment. We will merely now say that we agree with Col. King that the \$200,000 which he has received in that company's stock, though apparently a large sum, would scarcely tempt him or any other man, to perform the same services over again.

Mr. King concludes his speech with the following statistics, showing the immense trade which this road will concentrate upon New Orleans:

"To secure to New Orleans all the advantages of her position, she must place herself at the outlet of the great railway communication across the interior of the continent, as nature has placed her at the gate of the Mississippi Valley, and made her the commercial point of the coast of the Mexican Gulf. If she will do this, Texas, New Mexico, Chihuahua, Sonora and Arizona, will soon be teaming with enterprising millions of the American race, who will send forth, together with the Pacific States, to this great southern mart; products, annually, worth hundreds of mil-

lions of dollars. This may seem a flight of imagination, but if we consider for a moment we shall not doubt the coming reality. Texas possesses a territory more than five times the extent, and much more fertile than that of New York. The Indian territory north of her is twice as large. New Mexico and Utah are capable of sustaining a large mining and grazing population and of sending to market a very large amount of the precious and other metals, besides wool, hides and animals. Sonora now exports five millions of silver bullion annually, and in 1848 she exported eleven millions. In the hands of Americans she may produce fifty. Chihuahua is equally rich, and may be made to produce as much. California already exports annually more than fifty millions of gold. The trade of Oregon and Washington will soon reach twenty millions. Australia annually exports more than sixty millions of gold. All those countries will obey the laws of trade and consumption, and as they do not and will not manufacture, they will import to very nearly, if not quite, the value of their exports. Suppose this road can be completed within ten years, the value of the commerce which it will bring to this city may be summed up as follows:

Texas will produce at least one million bales of cotton, worth.....	\$50,000,000
Wheat.....	10,000,000
Products of New Mexico and Utah.....	10,000,000
Sonora, say.....	50,000,000
Chihuahua.....	25,000,000
California.....	50,000,000
Oregon.....	10,000,000
Washington.....	5,000,000
Australia.....	50,000,000
Provinces of Mexico, south of Sonora and Chihuahua.....	25,000,000
Total.....	\$335,000,000

The advantages which this city now possesses in the vast amount of exports will not only be greatly augmented by their increase, but will secure to her the return freights in the shape of package goods and all other supplies for those States sending to her their products. This is a field of commerce which she can create for herself without the fear of a rival in competition. It will bring to her a flood tide of prosperity which will know no ebb, and which will so augment her wealth that by suitable improvements, she may drive disease far from her shores, and become, not only one of the most powerful and prosperous, but one of the most healthful cities of the world. But to accomplish these great results, she must come forward in an enlightened spirit of liberality, and patronize the great work of the age, and give the world confidence in its sure and speedy completion.

The convention in New Orleans adjourned to meet in Marshall on the 13th inst. We understand that the stockholders in New Orleans, finally came forward almost unanimously, and paid up the 50 cents on each share of their stock, as had been done by most of the stockholders elsewhere; so that when the convention meets in Marshall, they will be fully prepared to make the cash payment of \$327,000, when they will be placed again in undisputed possession of the road, and all its fixtures and assets. We also learn that before the convention in New Orleans adjourned, a resolution was passed agreeing to attend the convention proposed by the Memphis and El Paso Railroad Company and the Southwestern Mission Railroad Company, to be held at Memphis on the 15th day of February next. We learn that the main object of this convention at Memphis is to consolidate the three companies, so as to unite them all in the construction of a great common double track trunk from some con-

venient point of junction near the Eastern borders of Texas to El Paso. Such a measure, by harmonious co-operation, will do more to secure public confidence in this great enterprise, than all else that has been done. This consolidation of three great companies must also enable them to exert a powerful influence upon Congress, in favor of the Southern route.—*Galveston News*.

MID-LOTHIAN COAL MINES VIRGINIA.—
CORNISH PUMPING ENGINE, ETC.

BY JOSEPH BUZZO, M. E.

The mines of the Mid-Lothian Coal Mining Company are situated in Chesterfield County, thirteen miles from Richmond, and a half a mile from the Richmond and Danville Railroad—a branch track from that road connects the mines with their shipping point, opposite Richmond.

This Company has been formed and in successful operation for about twenty years. They now own about 2000 acres in the heart of the Chesterfield bituminous coal basin. The coal is considered of superior quality for gas, grate, and forge purposes, and finds a ready market. The average thickness of the seam of coal, varying from four to fifty feet, may be estimated at about twenty feet. Several vertical shafts varying in depths from 550 to 771 feet have been sunk through the vein at different points, and communication effected from one to the other, which gives good ventilation to the underground workings.

By the aid of three large hoisting engines they are able to raise a large quantity of coal. The Company are now engaged in sinking a new shaft near the center of their ground, which they expect to complete in twelve months; and which, when completed, will open to them an additional valuable field of coal. About two years ago this Company leased a small piece of land adjoining their mines through which, than from any other point, coal could be more advantageously raised; and drove a drift into what was considered an unwrought piece of coal, when suddenly they cut into an old drift connected with extensive underground workings filled with water. This communication was at the highest point of the Company's workings; and as the old workings cut into were connected with vertical shafts four or five thousand feet deep, and filled with water, the force with which the water poured into their works, was enormous. It swept away thousands of the timbers in its route, washed up the railway tracks, knock down large quantities of coal, in a few minutes filled the workings, and stood forty feet above the drifts, in the principal vertical shafts. This accident occurred fortunately about midnight, when only fifteen hands were below, ten of whom were lost. Previous to this the water had been kept out of the mines by large buckets fixed in cages and worked by the hoisting engines at night; but now so large a quantity had come in at once, and additional feeders having been cut, it was found that the whole power of all their hoisting engines, working day and night, was only sufficient to keep the water at bay, and that some additional power would be necessary to free the mines.

By taking accurate measurements of the buckets, and keeping an account of the number raised, it was ascertained that the quantity in twenty-four hours was about 220,000 gallons.

It was determined to erect a pumping engine of sufficient power to drain the whole of the workings, leaving the hoisting engines for the exclusive purpose of raising coal.

After due investigation by the Directors in regard to the best kind of pumping engines now in use, in the course of which, advice was taken from various engineers, it was finally, only on the urgent recommendation and by the advice of Wm. W. Wood, Esq., Chief Engineer, U. S. N., that it was decided to erect a Cornish pumping engine, of the most improved kind. Proposals were invited from the principal foundries of the country for building such an engine. Those of Messrs. Merrick & Sons, engineers, and proprietors of the Southwark Foundry, Philadelphia, were accepted, and preparations immediately commenced at the mines for erecting the machinery. Here many difficulties presented themselves. All the fixtures and pit-head had to be removed, and it was then ascertained that the curbing timbers of the shaft would have to be renewed.

This was a work of difficulty and danger, for the soft nature of the materials near the surface caused the sides of the shaft to cave in as soon as the old timbers were removed. Great precaution had then to be exercised in saving the shaft and protecting the workmen. It was accomplished in five or six months without any injury to men, and the shaft re-cribbed with foot square timbers.

The foundation of the engine house, which is within a few feet of the shaft, had to be quite deep, and from its great weight it was feared it would crush in the sides of the shaft. To prevent this, heavy timbers, 20 inches square and 28 feet long, were placed below the foundation between it and the shaft, and extending eight feet on each side of the shaft into the solid earth.

The foundation is of granite about 20 feet deep, the cylindrical pillar of the same material and depth, and 17 by 24 feet. The beam (or bob) pillar, which is the front wall of the engine house, is of the same material, 24 feet wide, 6 feet thick to surface line, and 5 feet thick above that line, and 27 feet 6 inches above the surface. The rest of the engine house is of brick, with walls 34 inches thick. The boilers are in a separate house, in the rear of, and connected with, the engine house.

The engine is a "beam Cornish." Its cylinder is 60 inches diameter with 10 feet stroke of piston. The piston is packed with a single cast iron ring, bored eccentrically and slit and tongued on the thinnest side; being kept central and in contact by four springs. The beam is of equal lengths, 28 feet 6 inches from center to center of end pins, having wrought iron catch pieces. It is double, and besides being of the usual proportion for strength, is banded by heavy wrought iron bands on the upper side, put on hot, and extending from under side of bosses around them, and over horns cast with the beams on their upper side. The total weight of the beam and center shaft is nineteen tons.

The cylinder is, of course, steam jacketed and cased as usual. The valve gearing is of the most improved kind, and for the purpose of gaining room, the exhaust chest is on one side of the equilibrium pipe, which is central. The exhaust pipe is carried through a trough supplied with cold water from the condensing cistern. There are two cataracts, one being applied to regulate the opening of the equilibrium valve. The steam arm passes through

a slot in the (single) plug-rod, and is shut by a curved tongue piece, whose position is controlled by a regulating screw, of length sufficient to give the requisite variation in cutting off. The valves are opened by weighted pistons moving air-tight in cylinders on the cataract floor. The air pump is 26 inches diameter, 5 feet stroke, dipping into the condenser, and having in its bottom a grating carrying a circular gum foot valve. The bucket valve is also of gum; the delivery valve a cast iron float faced with wood. The injection valve is provided with a "wing throttle," opened and closed with the exhaust. The vacuum attained is 28 inches. The condenser and greater part of the air pump are immersed in the condensing cistern, and covered with water. A balance bob is on the surface connected with the main rod.

Steam is furnished by three single flue boilers, 6 feet diameter, 26 feet long, set below ground level. The flue is 45 inches diameter, containing at the firing end the grate, which is 6 feet 9 inches long. The heated gases passing first through this flue, return at the sides to the front end, descend and pass under the bottom with the connecting flue to the chimney. This connecting flue contains a heater 30 ins. diameter, 28 feet long, through which the feed water passes before entering the boilers. Over the front end is a steam drum 30 inches diameter, 13 feet long, connected by pipes to stop-valves in each boiler, and from which rises the main steam pipe. The boiler shells and flues are of three-eighths inch best Pennsylvania plates. The heads are of half inch plates.

The chimney is four feet square in the flue, 70 feet high.

The feed water is supplied from an adjacent spring by a steam pump, the Mine water being too much impregnated with mineral substances.

This engine has been erected upon one of the deepest vertical shafts on the concern, which is 770 feet deep. The pit-work consists of three plungers and one drawing lift, each ten feet stroke; the whole of them are of the same size bore, being fourteen inches diameter, as all the water accumulates to bottom. The main rod is of Pennsylvania pine; the first 240 feet from nose of the bob, is 16 ins. by 14 ins.; the next 240 feet is 14 ins. square; and the remaining 240 feet is 12 ins. square—thus making the entire length of main rod 720 feet. These rods are joined together by scrap-iron strapping plates 16 feet long, with sixteen screw bolts in each plate, and each joint having four plates. These rods are supported the whole length in guides (or stays) not exceeding 30 feet distant; these guides are of wood, 7 ins. by 10 ins., fastened into the wall of the shaft, and are held together by screw-bolts and iron glands, which at any time can be easily adjusted. At each set of those guides the main rod is protected by thin hard wood linings, and held to the rod by quarter glands screwed. Each plunger pole is screwed to the main rod by eight strong iron staples and glands, with a filling piece of wood nine inches thick—the upper end of the stockworks through a set of guides similar to those on the main rod. The main rod has four sets of catches, three of these on the down stroke and one on the up stroke of the engine, which prevents the whole machinery traveling beyond a given length of stroke in case of accident.

The foundation for each plunger consists of ten pieces of pine twelve inches deep, fastened into the walls of the shaft in front of

the main rod. And at one side of the rod cross timbers are again built upon the same, four feet wide and five feet deep, fitted very snugly together, constituting fifteen feet of solid timber under the cistern, thereby preventing any spring or motion in the plunger or column on the turn stroke of the engine.

The stuffing-boxes are packed partly with Russian yarn and partly with gum; either of these alone was found not to answer so well.

The construction of the clacks introduced here, are what are commonly called the Gribble clack, consisting of a cast iron shell or lid, 1½ inches thick, having a hinge which works upon a pin or bolt, supported by two loops fastened to the outer part of the seating. This hinge lifts about two inches in the loops at every up stroke of the water. The shell has a groove one inch and a quarter deep by one inch wide all around, shaped to the face of the seat; in this groove four slips of sole leather are fastened on their edge, leaving a projection of ¾-inch for a beat upon the seat. The water ways through these clack seats and throughout the entire column are the same in diameter as that of the plungers. Some of these clacks have been at work over six months without being re-gear'd.

This engine was started to work towards the latter part of last May, and in a few months drained the mines some 300 feet to the present working level, and the raising of coal has been resumed with vigor.

The usual speed in draining was from five to seven strokes per minute. At present the mine is kept clear by working at four and a half strokes about one day in six.

This is the first pumping engine of the kind which has ever been erected in this State. She works in admirable order, and for material and workmanship reflects great credit to the builders. The company are moreover entitled to great credit for the foresight shown in providing in the erection of this engine a surplus which will enable them to extend their operations to almost any extent. The hoisting engines are of the ordinary kind of high pressure, and coal is raised by the cage and guide rods, with four wheel boxes which carry half a ton of coal in each box, and when at full speed it is estimated to raise sixty of those boxes per hour with each engine.

In view of the wide extent of territory, the superb machinery erected, and other facilities for making large and profitable returns, this Company may congratulate themselves as one on the eve of doing a wide and profitable business for many years to come.—*Journal Frank. Institute.*

☞ The Buffalo Express of Saturday publishes in advance a list of Lake disasters for 1858, compiled by D. P. Dobbins, Secretary, from the statistics furnished by the Marine Inspectors of the Board of Lake Underwriters, and designed to be embodied in his report to the Board, at their next meeting, February 16th, at Chicago. By this list it appears, that the loss by steam vessels during the year 1858, was \$194,305; loss by sail vessels \$537,927; total loss by steam and sail vessels \$732,232, being a decrease on the year 1857 of \$655,703. The loss of life in 1858 amounted to 122; in 1857 it amounted to 490; decrease last year 368.

MISSISSIPPI.

Resolutions were adopted at the recent Special Session of the Legislature instructing their Senators in Congress, and requesting the Representatives to use their best efforts to procure the passage of a law by the Federal Government for the removal of the natural aqueducts connecting Gulf and Ship Island Harbor, in the State of Mississippi, with the Mississippi river, which was closed by the Government, during the war of 1812, for the purpose of common defence.

The Government of the United States having shut up this natural outlet to the Gulf, it was, and still is its duty to open it again; because the ordinance under which Louisiana was admitted into the Union, by which the United States got possession of Bayou Manchac, (the only available outlet which was closed,) required it to be kept open and free for the people of all the States.

It is alleged that the advantages that this outlet possesses over all others, are of a four fold character:

1st. The canal proper will be but *two and three fourths mile* long to the point where it intersects Bayou Dupre, (which is sufficiently large to pass the heaviest steamers on the river), and the remaining distance to Lake Borgne two and a half miles.

2d. It will enable a vessel leaving New Orleans to reach sailing water at the distance of sixteen miles, and Ship and Cat Island Harbor at forty-two miles.

3d. It offers twice the depth of water claimed by any other outlet to the lake.

4th. It will reduce the tonnage seventy per cent. on the present river charges, and fifty per cent. on those of the New Orleans and Pontchartrain canal, as well as shorten the present route to Mobile, through Lake Pontchartrain about fifteen miles, and that through the river about seventy miles.

The Legislature of Mississippi, in 1857, appreciating the great utility of the enterprise, in a memorial to Congress, strongly recommended it as a national work and asked in its behalf the favorable consideration of that body.

KING'S MOUNTAIN RAILROAD.

A meeting of the stockholders of the King's Mountain Railroad Company convened in the Court House on Monday last. Mr. Samuel Rainey was called to the chair, and Messrs. J. A. Brown and Samuel W. Melton acted as Secretaries.

In December last, a portion of the stockholders dissatisfied with the management of the road, resolved, in public meeting, that the offices of Secretary, Treasurer, Auditor, Book-keeper, and Agent should be united; that the offices of Agent in Chester and Superintendent be dispensed with; and that the contracts for repairing the road should be let out to the cheapest bidder. A copy of these resolutions was served upon the directors, who, upon deliberate consultation, determined that to carry them out would impose heavy losses upon the road and the community, for which they were not disposed, in any degree, to

hold themselves responsible. The only alternative required them to resign their trusts, and for this purpose the meeting of last Monday was called by the President.

Upon the organization of the meeting, Mr. Adams, the President, read the letter of the Board, refusing to obey the instructions of the former meeting, and tendering their resignation. After debate, the letter was accepted, and an election immediately held for a new Direction. It resulted as follows:

Dr. James M. Lowry, *President*.
Dr. J. R. Bratton, W. A. Latta, S. G. Hemphill, J. W. Avery, H. F. Adickes, E. A. Crenshaw, B. T. Wheeler, J. S. Ryan, (of Charleston), *Directors*.

At a meeting of the Directors, we learn, Major John G. Enloe was elected Secretary, Treasurer, Auditor, Book-keeper, Agent; Mr. Robert McLure was retained in the office of Conductor; and Mr. W. E. Role, was chosen General Overseer.—*Yorkville Eng.*

MONETARY AND COMMERCIAL.

There appears to be a slightly increasing demand for money, which is, however, freely met, though Bankers discriminate a little more closely as to their selections of paper.

There is nothing new to note in the movements of Exchange unless it be that there appears to be more making than has been presented for some days past created by operations in provisions for Eastern accounts. We give our former quotations, observing that most of the Bankers report it very difficult to keep a supply even at full rates:

	BUYING.	SELLING.
New York Sight.....	1/2 @ 35 prem.	3/4 @ 34 prem.
Boston.....	1/2 @ 35 prem.	3/4 @ 34 prem.
Philadelphia.....	1/2 @ 30 prem.	3/4 @ 34 prem.
Baltimore.....	1/2 @ 35 prem.	3/4 @ 34 prem.
New Orleans.....	1/2 @ 35 prem.	1 prem.
American Gold.....	1/2	3/4 prem.

The State Bank of Ohio has a new plate for ten dollar bills. A group of three figures forms the vignette, and the right hand corner has a portrait of the President of the Bank, J. Andrews. The bill is beautifully printed, and presents an improved appearance over the old ones.

The earnings of the Pennsylvania Railroad from all sources for month ending—

	Gross Earnings.	Ex-penses.	Net Earnings.
December 31, 1858.....	\$410,971 06	\$63,245 46	147,725 50
Same month last year.....	383,208 51	200,477 27	132,731 24
Increase.....	\$27,762 55	2,768 19	24,994 30

Earnings of the Railroad from all sources from Jan. 1, 1858, to

Jan. 1, 1859.....	\$5 185,330 68	3,021,835 04	2,163,445 64
Same period last year.....	5,207,243 59	3,336,354 24	1,871,189 35

Increase.....	\$87,787 09		\$292,256 29
Decrease.....		\$204,469 20	

SALES AT THE NEW YORK STOCK BOARD.—Jan. 22.

\$1,000 Virginia G's.....	96 1/2
2,000 do.....	96 1/2
26,000 Miss. G's.....	96 1/2
2,000 Cal. State 7's, new bonds.....	88
1,000 N. Y. Cent. Bds. 7's.....	102 1/4
1,000 Erie R. R. Conv. Bds. 7 1/2.....	43
2,000 Harlem R. R. 1st Mort.....	92 1/2
2,000 Mich. Ct. R. R. S. & P. Ct. 1st M. S. F. Ct. B's.....	96 1/2
1,000 Mich. So. Second Mort. Bds.....	68 1/4
3,500 Ill. Cent. R. R. B's.....	80
1,000 La C. & Mil. L. Gt. B's.....	23 1/4
1,000 Kentucky State G's.....	11 3/4
500 Shares New York Central.....	84 1/2
100 " Pacific Mail St. Co.....	86 1/2
57 1/2 " Erie R. R.....	14
106 " Milwaukee & Miss.....	12 1/4
155 " Hud. River R.....	34
400 " Reading.....	40 1/4
100 " Mich. S. & N. Ind. G'd Stk.....	47
100 " Panama.....	116
100 " Illinois Cent. R. R.....	58 1/2
420 " Galena & Chicago.....	71
100 " Chicago & Rock Island.....	60
200 " Harlem R. R.....	13 1/2
35 " Cleve. & Pittsburgh.....	9 1/4
100 " Mich. Cent.....	52 1/4
100 " Mich. S. & N. Ind.....	20 1/4
10 " Cleve., Pains. & Ash. R. R.....	120

COAL BURNING LOCOMOTIVES.

The Illinois Central Railroad Company have been using some coal burning locomotives on their road. The Superintendent of machinery gives the following as the comparative cost of wood and coal burning engines for the months of September and October, 1858:

SEPTEMBER.			
Pas'ger Engine No. 25—wood	\$8 69 @ mile	62 @ ct. in	
" " 125—coal	3 29 "	52 @ ct. in	fav. of coal
" " 15—wood	7 00 "	52 @ ct. in	
" " 126—coal	2 30 "	52 @ ct. in	fav. of coal
Freight " 62—wood	12 62 "	62 @ ct. in	
" " 100—coal	4 79 "	52 @ ct. in	fav. of coal
" " 59—wood	12 75 "	58 @ ct. in	
" " 107—coal	6 38 "	52 @ ct. in	fav. of coal
OCTOBER.			
Pas'ger Engine No. 25—wood	\$7 47 @ mile	60 @ ct. in	
" " 126—coal	3 09 "	50 @ ct. in	fav. of coal
" " 125—wood	8 19 "	50 @ ct. in	
" " 62—coal	4 09 "	64 @ ct. in	fav. of coal
Freight " 62—wood	14 65 "	64 @ ct. in	
" " 100—coal	5 14 "	60 @ ct. in	fav. of coal
" " 59—wood	11 67 "	60 @ ct. in	
" " 107—coal	5 79 "	52 @ ct. in	fav. of coal

Copper furnaces are used, and after eighteen months use on the heaviest freight engines, show no signs of giving out; in fact the deterioration of the thickness of metal is hardly perceptible; not more so than an iron furnace would have been in a wood burner, which had been used the same length of time.

CLEV., COL. AND CINCINNATI R. R.

OFFICE OF THE C., COL. & CIN. R. R. Co. }
Cleveland January 11th, 1859. }

To the Stockholders:—

The Earnings and Expenses of your Road for the year 1858, have been as follows:

EARNING FOR ELEVEN MONTHS TO DECEMBER 1ST, 1858.

Passengers.....	\$320,344 66
Freight.....	588,552 21
Express.....	12,983 31
Mail.....	25,675 10
Rents.....	6,474 42
Dividends Received.....	487 87
Interest on Deposits.....	4,211 17
December Earnings.....	1,021,728 64
	84,375 35

Total for the year..... \$1,106,103 99

EXPENSES FOR ELEVEN MONTHS TO DECEMBER 1ST, 1858.

General Expenses.....	\$ 14,858 68
Passenger ".....	55,312 52
Freight ".....	193,098 59
Fuel.....	39,372 59
Repairs of Track.....	119,435 62
" Freight Cars.....	53,915 55
" Passenger Cars.....	21,826 96
" Locomotives.....	43,516 82
" Buildings.....	10,336 14
" Bridges.....	620 40
" Fences.....	800 95
Losses and Damages.....	7,937 19
Oil.....	8,842 78
Waste.....	1,235 16
Fire Damages.....	26 79
Gratuities.....	2,362 69
Stock Damages.....	1,663 29
Taxes.....	10,878 86
Interest.....	455 86
Exchange.....	1,548 41
Inter'l on Franklin Co. Bonds	3,305 00
Expenses for 11 Months.....	291,049 96
December expenss estimated.....	46,500 00
	531,049 96

Net Earnings for the year..... \$575,054 03

Dividend paid 1st of Aug. last 5 per cent..... 237,305 00

Dividend payable 1st of Feb. next, 5 per cent..... 237,315 00

Surplus Earnings..... \$100,444 03

There has been expended for Construction during the year past..... \$19,293 84

Cash on hand this day, (with December expenses paid, and Franklin Co. Bonds \$50,000 paid)..... \$240,177 84

THE RAILROAD CONSOLIDATION.—The terms of the lease of the Buffalo & Lake Huron Railway to the Great Western Railway Co. are substantially these: The latter company have a lease for ninety-nine years, which it is expected is already ratified by the English Board, commencing on the first of May next. The Buffalo & Lake Huron Railway has no floating debt. Its bonded debt is \$2,500,000 and capital paid in \$3,500,000; making a total of \$6,000,000. The first year the Great Western guarantees the payment of two per cent., and increasing this per centage yearly until the third year, when they pay five per cent., on the capital and interest on the bonded debt at the rate of six per cent., at which rate the rental continues until the expiration of the lease.

The Buffalo & Lake Huron Company lately purchased the harbor of Gooderich and 250 acres lying contiguous, and pledged themselves to expend a certain sum annually in docking and dredging this harbor. This agreement the Great Western Company also assumes and will fulfill.—*Buffalo Com. Adv.*

PROSSER'S PATENT ORIGINAL LAP-WELDED IRON AND STEEL BOILER TUBES, SAFE FROM END TO END.

PARIS' PATENT
ENAMELED IRON PIPES AND PUMPS,
FOR WATER SUPPLY, ACIDS, ETC.

SOLE IMPORTERS.

PROSSER'S PATENT SURFACE CONDENSER for high pressure steam, with sea or other bad boiler water, gauges, 3-cutter drills, counter-sinks, tail-end cutting bars, expanders, tube cutters, steel wire and whalebone brushes, pall lever wrenches, tubes—plain or enameled, screwed together for Artesian Wells, Hollow Blows for various purposes. *Steel for Rollers.*
THOS. PROSSER & SON,
27 Jan. 28 Platt Street, New York.

**W. HARVEY'S
SAFETY JOINT**
FOR
Coupling the Ends of "T" Rails.
PATENTED, NOV. 22, 1853.

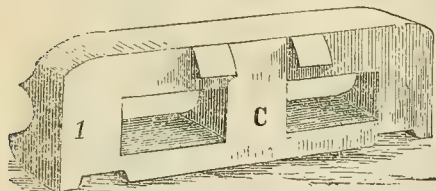


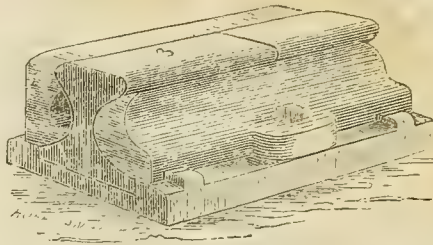
Fig. 1 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or it only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in

part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint by spikes passing through the chair and down the edges of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongue passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the others. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
41 Jefferson-street, Albany, N. Y.
T. WRIGHTSON, AGENT, Cincinnati, O.

Cin. & Marietta First Mortgage Bonds

Holders of these who have not signed a power of attorney to Mr. Ballet are requested to send their addresses and number of bonds held by them to
MR. LANCE, 15 Throgmorton St.,
London, England.
Jan 20-1t

THE KENTUCKY MILITARY INSTITUTE,

DIRECTED by a Board of Visitors appointed by the State, is under the superintendence of Col. E. W. MORGAN, a distinguished graduate of West Point, and a practical Engineer, aided by an able Faculty.

The course of study is that taught in the best Colleges, but more extended in Mathematics, Mechanics, Machines, Construction, Agricultural Chemistry and Mining Geology; also in English Literature, Historical Readings, and Modern Languages, accompanied by daily and regulated exercise.

Schools of Architecture, Engineering, Commerce, Medicine, and Law, admit of selecting studies to suit time means, and object of Professional preparation, both before and after graduating.

The twelfth annual term is now open. Charges, \$102 per half-yearly session, payable in advance. Address the Superintendent, at "Military Institute, Franklin Springs, Ky.," or the undersigned.

P. DUDLEY,
President of the Board.

Jan. 5 tf.

LANE & BODLEY MANUFACTURERS OF WOOD WORKING MACHINERY,

AND
CIRCULAR SAW MILLS.

Lane & Bodley's celebrated Power Mortising Machine and all Machinery used in Rail Car Shops.

Corner John and Water Sts., CINCINNATI, O.
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1,200 Kegs No. 1 Railroad Spikes, 5½ by 9-16th,
Corby, Gossin & Co.'s make, for sale very
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TRABER & AUBERY,
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Ten cents per number. All sent free by Mail,

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9 Spruce Street, New York.

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McCallum, Bristol & Co., are prepared to construct **McCALLUM'S PATENT INFLEXIBLE ARCHED TRUSS BRIDGE**, for Railroad and Highway purposes at any point in Ohio, Indiana, Illinois, Mississippi, Wisconsin and Minnesota on as favorable terms as any other bridge, and in the most approved and perfect manner. Parties desiring information, will please apply to the firm at their Office 60 and 62 St., Cincinnati, or to McCallum, Seymour & Hawley, No. 110 Broadway, N. Y. Ag. 25.

CONTRACTS for Rails at a fixed price, or on commission, delivered at an English port, or at a port in the United States, will be made by the undersigned,
THEODORE DEHON,
no 13 10 Wal ar Broadway, New York.

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TERMINATES AT WASHINGTON AND BALTIMORE on the East, and Wheeling, Benwood, and Parkersburg on the West, at which places it unites with Railroads, Steamers, etc., for and from all points in the

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TWO TRAINS

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Direct connections are made by these trains

FOR ALL THE EASTERN CITIES.

This is the only route to Washington City. Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.
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The undersigned is prepared to furnish SPECIFICATIONS, ESTIMATES, AND PLANS,

In general or detail of all kinds of Steam Vessels, Engines, Boilers, Mill Work, &c.

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WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

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Through from Cincinnati to Wheeling WITHOUT CHANGE OF CARS.

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The above Trains arrive in Baltimore at 7:35 A. M., 5:00 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire for Tickets via BALTIMORE & OHIO RAILROAD.

FOUR trains leave Baltimore daily for WASHINGTON CITY, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for PHILADELPHIA, NEW YORK and BOSTON.

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And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation
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MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this country, and it is universally conceded that they can not be excelled. The Roofs, are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting always iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary bridges. We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 2,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2,600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracting.

Office, No. 66 West Third street, Cincinnati, O.
may 13. MOSELEY & CO.

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London.

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

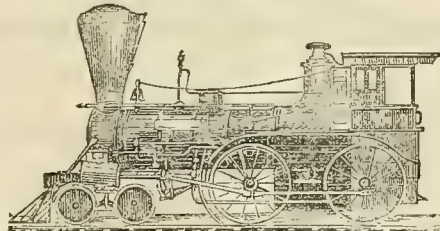
And all information, apply at the Offices, Walnut Street House, 5th, Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

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MOORE & RICHARDSON.

1858. CINCINNATI AND ST. LOUIS. Through without Change of Cars, OHIO & MISSISSIPPI (BROAD GAUGE)



TWO DAILY TRAINS FOR

Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:30 P. M., daily, (Sundays excepted.) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c. large Cuts for Show Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
jan8 1y 119 Walnut st., Odd Fellows' Building

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6 00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6 00 A. M.—Richmond, Indianapolis and Chicago Express.

8 40 A. M.—Cleveland and Pittsburgh Express.

4 30 P. M.—Dayton, Sydney and Sandusky Night Express.

4 30 P. M.—Richmond, Indianapolis and Chicago Express.

4 30 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains East and West; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan Road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I. Road.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut Off—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cresline for Pittsburgh, Philadelphia Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations.

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their Improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT.

Union Works, Baltimore.

POOLE & HUNT,

Iron Founders & General Machinists,

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

WHEELS AND AXLES fitted for use.

HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GAS-HOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLEYS and HANGERS.

WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

ANDERSON, GATES & WRIGHT,

STATIONERS, BOOKSELLERS,

—AND—

Blank Book Manufacturers,

No. 112 MAIN STREET,

East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS,

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(SUCCESSORS TO JACOB ERNST.)
112, Main Street, (Cincinnati)

SCHENECTADY Locomotive Works,

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN Supt. Aul. ly

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 4½ feet diam. December 18th, 1853.

D. M. CARHART, TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canadas, please address, Respectfully Yours,

D. M. CARHART,
Box 183 1 Cleveland, Ohio.

T. F. RANDOLPH & BRO. Mathematical Instrument Makers

Removed to No. 67 West 6th St.
CINCINNATI, O.

MCDANIEL & HORNER, LOCO- MOTIVE AND CAR SPRING

MANUFACTURED BY WILMINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R. R. Co.

May 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

G. G. LOBDELL. H. L. M'COMBS. D. P. BUSH.

BUSH & LOBDELL,

Wilmington - - - - - Delaware.

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES,

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent

FOR THEIR

CELEBRATED WHEELS,

EITHER SINGLE OR DOUBLE PLATE.

WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

Its durability superior.

Unlike other new forms of rail, it can be put down upon the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars may be addressed to

June 17.—lyr.

E. W. STEPHENS, Cincinnati Ohio.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about

lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

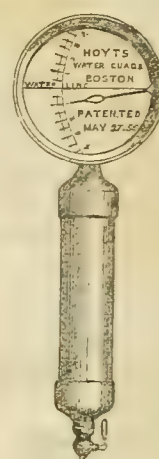
March, 1855.

F. 25, trj

VOSE, LIVINGSTON & CO.,

29 South William St., N. Y.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered by the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
jy30 No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

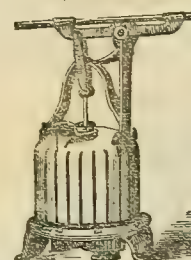
CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use and acknowledged by all who have used them to be perfect—are simple in their construction, compact, durable and not likely to get out of order, well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines, and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings, Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—ly

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, FEB. 3, 1859.

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The contract for building the Canada Southern Railway, extending from Niagara River to Detroit, has been given to Mr. Morton, of Kingston, at \$40,000 per mile.

A RAILROAD CLOSED.—The Northern Railroad of Canada, otherwise called the Ontario, Simcoe and Lake Huron Railroad, has been closed by order of the Government Inspector of Railroads, as being unsafe. A partial re-opening has, however, taken place, as passenger cars are allowed to be attached to freight trains, and these are suffered to run during daylight at a slow rate of speed. This road has only been built for about three years, and the reason of its being unsafe is that *one-sixth of the rails are worn out.*

FIRMEN'S INSURANCE COMPANY.—We have before us the statement of condition of this old established Company, for Jan. 1st, 1859.

The capital stock is \$100,000 00, and the surplus \$24,151 88.

ASSETS JAN. 1, 1859:—

Real estate in Cincinnati, producing 9 per cent.....	\$66,297 32
Notes receivable.....	26,019 88
Little Miami R. R. stock.....	\$15,000 00
Cin. Ham. and D. R. R. stock.....	10,200 00
Columbus & Xen. R. R. stock.....	1,050 00
Cin. & Xen. Fuel Co. stock.....	250 00
Cin. & Xen. Insurance Co. stock.....	2,500 00
Hamilton county bonds.....	7,000 00
Col. & Xen. a dividend bonds.....	3,300 00
Little Miami R. R. bonds.....	11,000 00
Covington and Lexington railroad 7 per cent. bonds.....	1,000 00
Cash in Bank.....	20,747 60
Acco. nts current for 6 months ..	28,620 00

Total cash assets.....\$262,873 20

LIABILITIES:—

Unpaid dividends.....	\$1,818 00
Unsettled losses.....	6,912 32
Total liabilities.....	\$8,730 32

Balance cash assets.....\$194,154 88

This company has no agencies, and is doing an entirely home business.

Directors for 1858-9: Edmund Dexter, Jas. Cathoun, John S. Chenoweth, N. W. Thomas, Peter A. White, George Wilschire, J. T. Warren, John Whetstone, J. P. Tweed, Briggs Swift, Sam. J. Hale, Robert Andrews, John D. Minor, Chas. W. West, Pullock Wilson.

No. 50—Vol. 6.

RAILROAD TRAFFIC IN GREAT BRITAIN AND IRELAND FOR SEVEN YEARS ENDING DECEMBER 25, 1858.

We find a very interesting table in *Herald's Journal*, compiled by Mr. J. T. HACKETT, from which we condense the following:

	1st Quarter.	2d Quarter.	3d Quarter.	4th Quarter.
1852.....	£3,271,938	£3,728,167	£4,279,270	£3,910,885
1853.....	3,536,882	4,192,980	4,992,803	4,222,816
1854.....	3,988,264	4,687,163	5,181,320	4,682,218
1855.....	4,179,462	5,094,451	5,729,265	5,241,137
1856.....	4,809,615	5,605,056	6,152,991	5,725,939
1857.....	5,195,056	6,016,540	6,650,479	5,781,387
1858.....	5,047,379	5,784,226	6,336,779	5,895,381
Total for year 1852.....	£15,140,310			
" " 1853.....	16,445,531			
" " 1854.....	18,511,855			
" " 1855.....	20,241,153			
" " 1856.....	22,403,501			
" " 1857.....	23,672,465			
" " 1858.....	23,263,764			
Average traffic per mile per week.....				6915
Mileage over which the traffic was carried during the months of Dec. of each year.....				6944
				7306
				7692
				8414
				8676
				9016

From the above it will readily be seen, that the gross earnings of the railways of Great Britain have suffered materially from the great commercial revulsion of last year. This one feature, however, is observable, in which, in this respect, they differ from the railroads of this country, viz., that there was no decrease during the last quarter of 1857, as compared with the last quarter of 1856, the decrease being exclusively confined to the first three quarters of 1858, and that no recuperation took place until the last quarter of 1858. The railroads of the United States experienced their heaviest decrease during the last quarter of 1857, and very sensibly felt the results of increased traffic during the third quarter of 1858. Showing very clearly that the commercial revulsion produced its effects three months earlier, and that trade began to assume a more active tone three months earlier, in this country than in England.

It is not the mere sum of £408,701 which is the actual amount less of gross earnings for the year 1858, than for the year preceeding, but this sum added to £1,708,000, being the average yearly increase of railway traffic during the preceding five years, indicates an actual deficiency of £2,116,700 in the traffic of 1858 as compared with 1857 and preceding years. The average increase of railway traffic in the United Kingdom during the past fourteen years amounted to £1,380,000 per annum, which, added to the above decrease of \$408,700, would show a deficiency of £1,788,700 in the receipts of the past year as compared with the preceding years.

Mr. Hackett remarks, that in addition to the receipts of lines published weekly, and given in the above table, there are other receipts from traffic on lines, the traffic receipts of which are not published either weekly or

monthly, and for which an estimate has to be made, the amount of the traffic on these lines is about £500,000 for the past year on 552 miles of Railway, making, with the published returns, a total receipt of £23,763,764 on 9,568 miles of railway, including about 300 miles of canal, being at the rate of £2,484 per mile for the year 1858.

The expenditure on the 552 miles is about £9,000,000, and on the lines, the traffic of which is included in the table, £306,950,000, making together £315,950,000 expended on 9,568 miles of railway, being at the rate of about £33,000 per mile.

Relative to the constant increase of the capital of railroad companies Mr. Hackett makes the following sensible remarks, which accord so well with the views so frequently expressed in the *Record*, that we give them entire:

"The perpetual expenditure of capital on the old railways seems to counterbalance the advantages that might otherwise be supposed to arise from the introduction of many cheap railways into the system, that is, so far as reducing the average cost per mile. The average cost of £33,000 per mile is only about £1,000 or £1,400 less than in 1842, when there were not quite 2,000 miles of railway in the United Kingdom.

"The onward progress of railway traffic for a period of fifteen years, without any check of importance, except at times, perhaps in the amount of its increase over each preceding year, has had the effect of encouraging all sorts of extravagance, has strengthened the hands of Directors in keeping open the capital accounts, and in adding to their amounts every year.

"There are many reasons why the capital accounts of railways should be closed, their debts funded, and their powers defined and limited. There should be a time after the opening of a railway, that its capital account should be closed and everything provided out of revenue. It has been done in some instances, and it can be done.

"Open capital accounts and large balances might suit the purposes of bankers, directors, lawyers, engineers, and contractors; but they endanger the prosperity and stability of railway property. It must be apparent that until the principle of closed capital accounts and judicious sinking funds be understood and acted upon, railway property must not be expected to become so valuable, or remunerative, as it ought and should be.

"Fifteen years of successful increase in railway traffic had done its work, and it is hoped that the check it received from the depression of trade in 1857 and 1858 will not be forgotten by those who think the capital accounts of old lines ought to be closed. Fifteen years is but a short period in the life of a Railway Company, but it is a

long period to keep a capital account open, for no other purpose than that of increasing the liabilities of the Company, year after year. There are many serious reasons why the capital accounts of existing railroads should not be increased. Economy, instead of extravagance, should be the order of the day. Who can tell what Parliament might do in the course of ten or fifteen years by granting competing lines in all directions, the system being advantageous to landowners, who gain by the outlay of millions of capital, it is likely to be continued? Who can tell whether the excursion traffic on railways will continue for ever or only have its day? Who can tell to what perfection the electric telegraph might be brought, so as to save much expenditures in traveling? There are other things in the course of the next ten or twenty years that might occur to seriously affect the profits of Railway Companies. It is hoped that a better system will be adopted in future."

*TRADE OF CHARLESTON, S. C.

We gather from the *Charleston Mercury*, that there has been exported from that port during the past calendar year to various foreign countries the following goods, wares, and merchandise of the growth, produce, and manufacture of the United States:

	Value.
Cotton.....349,069 bales.....	\$18,683,263
Rice.....	666,922
Flour.....38,321 barrels.....	203,821
Wheat.....30,883 bush.....	37,620
Corn.....25,281.....	19,917
Lumber.....3,978 M. ft.....	67,282
Rosin and Turpentine.....33,194 barrels.....	111,148
Horses.....223 to Cuba.....	44,950
Sundries.....	351,282
Total.....	\$19,321,385

The total value of the exports of last year is about twenty-five per cent. greater than the value of the exports of the previous year, which makes a very gratifying exhibit of the substantial prosperity of the city.

The following is the dutiable value of goods imported into Charleston during the same period:

Piece Goods, Cottons.....	\$ 93,810
Manufactures of Wool.....	140,025
Guany Cloth.....	27,498
Manufactures of Iron and Steel.....	92,651
Railroad Iron.....	174,196
Sugar.....	135,145
Molasses.....	141,532
Salt.....	49,072
Spices.....	16,820
Coffee.....	48,579
Total.....	\$912,835

Relative to the imports the *Mercury* remarks that the facilities for importation at New York so far overbalance those of Charleston, that our import exhibit does not fairly represent the trade of our city. We were never better prepared to transact a heavy spring business than we are now. Importations for our trade have been unusually heavy, and the stock of goods now offered by our leading merchants, is of great variety and excellence of quality.

The tendency of the import trade, it will be seen, is to center in New York; and while Charleston increases her direct exports, the imports that are to supply the wants of her citizens, and the country that derives their supplies from that market, are mostly and more cheaply obtained through the medium of New York. The following table of the foreign commerce of Charleston from 1850 to 1858, will more clearly show the disparity of her direct imports from and exports to foreign countries:

Year.	No. of Vessels engaged in the trade.	Dutiable value of Imports.	Duties.	Value of Exports.
1850....	256	2,104,191	525,744 73	13,306,727
1851....	307	2,320,337	628,240 28	11,977,228
1852....	243	1,802,985	440,349 45	13,687,563
1853....	272	1,705,636	422,550 10	13,697,981
1854....	324	1,493,236	384,876 00	12,245,776
1855....	296	1,673,701	506,244 00	14,494,653
1856....	302	1,904,305	467,225 35	16,777,943
1857....	284	2,113,947	527,333 33	15,700,774
1858....	306	912,218	340,993 11	19,621,585
Total....	2620	16,313,995	4,294,240 95	130,592,427
Average amount of Exports for last 8 years....\$16,324,653				

The dutiable value of goods remaining in warehouse and not included in the foregoing table, is \$60,917, three-fourths of which consists of railroad iron.

LETTER FROM W. WRIGHTSON.

TUBAC, January 7, 1859.

T. WRIGHTSON, Esq.:

I have at last the pleasure of dating my letters from the long looked for town of Tubac. Indeed such seemed to be the difficulties of reaching this goal of our hopes and expectations, that I had almost despaired of reaching it. It was like Rome to Aeneas—ever flying before us—ever distant and seemingly a *lucus-mentes*. The dangers and difficulties of the journey are, however, over, and I am actually in Tubac, and have seen the mines both at Santa Rita and Cerro Colorado. I have already posted you as to the whereabouts of the train at Dragoon Springs, where I had decided to leave four wagons till I could go on with the balance to the mines. We left Dragoon Springs about two o'clock P. M., and traveled till nearly dark a distance of about ten miles, where we camped on good grass for the night. This I have always made a rule of doing. Next morning being January 1, 1859, we started before sunrise, and reached our camp ground on the San Pedro River about eleven. Here we found a Mexican train with cattle from Sonora. I purchased from them a fine young steer, which we dressed for beef, and had our New Year's dinner from the fresh and tender beef of Sonora. Here we were met by Mr. Grosvenor and Mr. McCoy. The meeting was a pleasant one, I can assure you. Mr. Grosvenor so represented the necessity of my going forward to Tubac to meet Major Heintzelman, that I decided, although reluctantly, to leave the train in charge of Mr. McCoy and go forward the next morning. Mr. McCoy

being perfectly familiar with the country and with train management, that I felt quite safe in leaving it with him. We had all begun to feel very anxious about the safety of the party sent to pursue the runaways. About two o'clock we were agreeably surprised to see two horsemen, on jaded steeds, approaching our camp. Their worn and weather beaten appearance indicated hard travel and hard fare. As they neared the camp, we soon recognised Mr. Cross and Mr. Hall—two of the scouts sent out. Every heart thanked God for their safe arrival and good tidings from the rest. As soon as we could give them a little refreshment, all were anxious to hear their adventures. On leaving camp they had taken the trail till it struck the post road for the west, when, deciding that the fugitives had taken the road for Sonora, they paid no further attention to the trail and dashed ahead. They followed the road to the San Pedro, and then struck down the stream towards Sonora. About sixty miles below the crossing, they came upon San Pedro Fort. The arrival of a party of mounted men, well armed, was a signal of alarm to the commandante at the Fort. The soldiers were paraded, cannons and muskets loaded, drums beat, and the walls of the Fort bristled with bayonets. A herald was sent forward to meet the intruders, and Mr. Hall of our party, was conducted into the Fort, and on leaving his arms at the entrance, was led into the presence of the commandante, where he was closeted for a long time, his business inquired into, cross questions asked, and re-asked, and finally the military authorities of the place being satisfied that the boys were no filibusters, Mr. Hall's arms were restored, and the whole party treated with politeness. Delivered from this scrape, and finding they were off the track of the mules, they enquired the way to Frontera, and set out again for that place. But amidst storms of snow and rain and the dim roads, they lost their way, and wandered over the wilderness without guide or compass, over mountains, across valleys and playas, hungry, cold and wet. Finding themselves hopelessly lost, they struck for the north, knowing that at some time they must by pursuing that course cross the stage road. Towards the last end of this terrible journey, when they rested at night to refresh their wearied animals, they were all so numb with cold and wet, that they could hardly descend from their horses. They undertook to get wood for a fire, and found nothing within reach, to burn, wet grass was all there was around them. It was a moment of intense solicitude, but after a further search they discovered a billock raised by the prairie rats to hold their winter stores. They seized upon it with the greatest avidity, tore it open, gathered the dry stores together, covered it over and enclosed it with

a blanket, and then came the important work of lighting it with one of the last three matches left in the party. One of these was tried and failed, and with it failed the hopes of those poor freezing and starving boys. Another was tried and to their great joy succeeded. They got a fire such as it was, and dried their clothes. While sitting here, a poor rat ran out from his hole, and they held a consultation as to whether they should catch the rat and eat it or not. They had then been forty-eight hours without eating a morsel. They decided they would go another day before they finally took to eating rats, and fortunately in twelve hours more arrived at the Mail Station at Apache Pass, from which they started ten days before, worn out and exhausted, both men and animals completely broken down. Thence, after refreshment by easy rides, they reached camp on New Year's day. I was overjoyed to see them, and glad that they were safe and sound. They displayed, in their perilous journey, great courage, energy and perseverance, and deserves the highest praise for these commendable qualities, and all our sympathy in their sufferings; yet, I could not but feel that all their sufferings was due to the circumstance of their overlooking my positive orders to *follow the trail*, and not trust to their own ideas of where the fugitives went. Subsequent examinations and information showed that the runaways followed the road only four or five miles, and then struck out from the road towards the mountains. Here they doubled and turned east and the animals were afterwards heard from at the Mimbres. They are now probably in the neighborhood of Mesilla, and I have sent two persons with authority to track them out and recover them. I trust to recover the animals and procure the punishment of the thieves.

On the morning of January 2, as early as the mules would drink, we set out for Fort Buchanan, and remained with the train some four or five miles, and then rode forward, leaving our friends and the train. The distance from San Pedro river to the Fort, is about forty miles, and as we rode rapidly over hill and dale, the country changed greatly in appearance. As we neared the Fort, we struck a wooded valley studded with larger trees of live oak and cotton wood, than I had seen since we left San Antonio. At Fort Buchanan we were hospitably entertained by Capt. Ewell. We also met here Mr. Brunet, the farmer settler, Dr. Irwin, Mr. Mercer, and the famous Col. Titus. The latter is now working a mine of lead ore in connection with some other gentlemen here, which they call the Union Mine. It is as yet in an inchoate state, and no opinion can be formed of its character, although the parties interested believe it to be very rich. During the evening we discussed freely many of the im-

portant political and social questions. I took high grounds in favor of law and order, and the gentlemen present coincided with me. The truth is the Colonel is here without men and without means, and has learned, as he acknowledged to me, that political excitements don't pay. He says he has lost a great deal of money and more of reputation by the Kansas squabbles, and he is determined now to mind his own business, and stick to law and order, and legitimate Democracy.

The next day we set out for Santa Rita, our future home, by the mountain trail. The wagon road runs round the southern point of the mountain by Calabazas, and is much longer. The trail crosses some of the lower spurs of the Santa Rita Mountains, about nine miles below the Fort, and then striking a Canon, mainly follows that to the southwest slope, where the head quarters of the company are established. In our mountain ride we every where saw indications of the mineral riches of this chain. But it is not every where that it can be worked with profit. The mountains are clothed to their very summits with excellent gramma grass, and there is an abundance of live oak, mesquite and cotton wood for fuel. There is also pine for lumber on the mountain slopes, but a little difficult of access. We shall, however, have to procure some for necessary purposes. This is a matter of no small labor with our limited force, but it can and must be done. We arrived at the Company's buildings in the evening just after sundown, and were heartily welcomed by all the inmates and employees. Mr. Grosvenor has, so far as I can see, in the limited time which I had for examination, done a great deal of work with very poor facilities. Owing to his exertions and perseverance, we have just at the House as good a spring of water as can be found—a house well built and sufficient to shelter us at present, a corral for our animals, and houses for our peons. In the morning I went up to the Salero to take my first view of the mine from which, I trust, the Company will hereafter reap a rich reward.

It is distant from the buildings about a mile and a half, and is opened quite a way up in the mountain. To one unused to look for mines, this mountain, previous to the opening of the Salero, would give but little indication of the existence of anything within its bosom. Its surface is covered with broken rock in weather worn pieces varying from 50 lbs. to half a ton in weight, in the interstices of which a little loose soil has been deposited by the winds and rains. In this scanty earth, rich gramma grass has taken root, which, by its luxuriance, gives the mountain in the distance the smooth look of a grassy field. Cutting directly into this by an opening about a yard wide, and thirty or forty feet long, in the old Salero shaft, which has now been

opened on the line of the vein about a hundred and twenty or thirty feet. Thus far the vein holds regular and distinct, but as we have not yet reached the bottom of the old workings, I shall not yet venture an opinion of its value or its probable productiveness. It is sufficient to state that Mexicans never worked without a result, and it is hardly probable that the old miners would have carried this mine so far if it had not been profitable, when there are so many others in this neighborhood which are sure to pay for the labor bestowed on them. Every mining region abounds in its fables and traditions, and one of these connected with the Salero is that when the old miners were driven from it by the Indians, they were working a vein of pure silver, two fingers breadth or nearly two inches wide. There are those now living who assert this as true from their own knowledge. For myself, I place but little confidence in mere tradition. I have before me the evidence that this mine was one of great importance, in the extent of the workings which now exist, in the fact that little rubbish was left on the ground for so extensive an opening; in the ruins of the old arastres and furnaces at the nearest water, some two miles from the mine, in the old trail leading from these to the mine and to Tubac, and in the general evidence that Tubac itself was the seat of the Paties, were located in which the richest ores were reduced, and that Tubac derived its importance from these works. This in my opinion is sufficient to justify our company in spending their greatest exertions in this mine. I visited no others at this time as the pressing nature of my business with Maj. Heintzelman rendered it necessary for me to hasten to Cerro Colorado, where the Major was anxiously waiting my arrival. On returning from the Salew we found our horses saddled by our faithful Mr. Page, and set out for Tubac. The road lies down the foot slope of the mountain which is washed into Cannons more or less difficult to travel. Mr. Grosvenor has, however, selected a route which, with a little exertion can be made a good wagon road.

My first view of Tubac was one which, I confess, did not convey as flattering impressions as I had anticipated. Three years ago, Tubac was entirely deserted, and had been so for some time. The first men that entered it to reside, were the exploring party sent out by the Sonora Exploring and Mining Company. The buildings they occupy are the only ones here, even in tolerable repair. They front on the plaza and occupy a portion of the north and south sides of the square, while the old church, which was once a handsome building, fills the west side. There is no business conducted here except by the Mining companies, and occasionally a wandering Sonoran, who brings a mule load of

oranges and spreads his tempting store under the shadow of the walls of the church. The buildings occupied by the Sonora Exploring and Mining Company, have been put in good repair, and afford a comfortable shelter. Here we were welcomed by Mr. Lathrop, Mr. Porter, Mr. Schuchard, and others connected with that Company. It being now late, we decided to rest our animals, and in the morning start for Cerro Colorado. Accordingly, in the morning we saddled up for our twenty mile ride. The road lays for several miles along the valley of the Santa Cruz, which sinks in the ground somewhere in this neighborhood, to rise again near Tucson, and then again to sink and pursue its underground course to the Gila. Ten miles ride brought us to the old Superi Rancho, but, as Col. Douglas was not at home, we did not remain here. The mining operations in this Rancho have attracted some attention, but so far, I believe, they have not yet struck the vein, nor are there any persons now employed in the mine. Eleven miles further brought us to Cerro Colorado—the seat of the principal mining operations of the Sonora Exploring and Mining Company. Here we met a cordial welcome from Major Heintzelman, Mr. Bruncken and others connected with the company, and after a little rest set out to examine the works and buildings of the company. This Company in the year and a half that it has been operating here, has done a great deal of work—more than has been done by all the other companies in the territory, with the exception *perhaps* of the Colre mines, near the Rio Grande. They are now engaged in opening a main shaft and running galleries for the successful working of the mines in a scientific manner. In the meanwhile, the miners are still at work on the old shaft on the line of vein, and in taking out rich ore. Selected specimens yield as high as twenty-six thousand dollars per ton. The seam in which this rich ore is found is very narrow, but widens as the shaft descends. The bulk of the ore is not so rich, but is still much richer than that of any mine now worked in this neighborhood, or in Sonora. This company have now two small furnaces at work which alone will pay all the expenses of working the mines. The bulk of the ore is suitable for amalgamation, and the company have their amalgamation works nearly completed at Arivaca, some ten miles distant, where they own the finest Rancho in this country, at least such is the opinion of all the residents here. The operation of their simple furnaces was the most satisfactory thing I saw. One may doubt an estimate, may differ from an opinion, however strongly supported by argument and the testimony of scientific men, but there is no disputing an actual fact, and it is a fact that these furnaces do reduce the ores and run out the silver at a great profit on the

expense of working them. When the amalgamation works are completed, mining will be prosecuted with greater vigor, and both amalgamators and smelters will be kept fully employed. At the present time, they are pressing forward the necessary works for the amalgamation of the great bulk of the ores which are suited to that process and not to smelting. What our Santa Rita ores will be suited to, remains yet to be seen.

I received this morning news from the train; it is at Calabazas to-night, and will be here, or rather at Tumacacori to-morrow, from that point we take it up to the mines, and probably on Tuesday next shall send after the other four wagons. When we get everything here, we shall feel quite settled and at home. Meanwhile I shall employ the bulk of the train in getting out timber for machinery and buildings, and lumber of various kinds, and hope when I write again, to give further accounts of the progress of things at the mines.

Meanwhile I am, Dear Sir,

Truly yours,

W. WRIGHTSON.

P. S.—Jan. 10. The train is now here.

PENNSYLVANIA RAILROAD COMPANY.

PHILADELPHIA, January 26, 1859.

To the Stockholders of the Pennsylvania Railroad Company:

At your adjourned annual meeting held on the 6th day of April, 1857, the following resolution was adopted:—

“Resolved, That the Board of Directors shall inquire, and report on the subject of fixing a terminus on the Delaware river, to a general or adjourned meeting of the Stockholders, for their approval, before taking any steps for fixing the terminus, and that they be directed to publish in the daily papers the report intended to be submitted to the stockholders, ten days before the meeting thereof.”

In pursuance of which, the following report is submitted for your consideration, and the annexed resolution recommended for your adoption, at the general meeting to be held on the seventh proximo:

REPORT.

The subject of a terminal depot on the Delaware river has claimed the earnest attention of your Board of Directors for some time. They have not, however, brought the matter to the attention of the stockholders at an earlier date for various reasons, prominent among which has been the determination of the Directors to avoid, during the recent financial crisis, all expenditures for new work not absolutely necessary to conduct the existing business of the Company.

There is now every reason to hope that the business of the country is recovering from its late depressed condition, and that a general activity will succeed the recent prostration in all branches of trade.

In view of this circumstance it is the opinion of your Board of Directors that the time has now arrived when measures should be

taken to secure a terminus on the Delaware front, to be reached by locomotive steam power.

The city of Philadelphia has expended millions in the completion of internal improvements to draw to her the trade of the West, and her great work undertaken for that object is now finished and connected with all of its principal avenues; yet is without the proper means of transferring from cars to vessels the vastly increasing tonnage anticipated from these connections.

The present cost of moving the through tonnage from West Philadelphia to Dock street wharf is not less than 25½ cents per ton, without making any allowance for delay, or the largely increased wear and tear of rolling stock passing over the imperfect railroad in this city. With our own line extended to the Delaware river, the same trade could be moved at a cost of six cents per ton, and a greatly increased carrying capacity insured for the same amount of rolling stock, from the fact that the trip could be made in one day less by the cars being unloaded and loaded on the day of arrival.

The present limited facilities at West Philadelphia for the accommodation of the coal and lumber trade impose a serious tax on those branches of business, and now prevent operators who use our line from competing on equal terms with those engaged on other lines, thereby prohibiting a large increase in those products of our State which it should be our pride, as it is our interest, to develop. The coal business is so restricted at present by want of facilities, that a trade exceeding 100,000 tons can not now be accommodated.

The transportation of large quantities of live stock could be secured for Eastern markets, if shippers were not obliged to drive through the crowded thoroughfares of Philadelphia to reach the New York lines, and much better time could be made in the transportation of all through trade to and from eastern cities, thus aiding us in giving better satisfaction to shippers, and thereby increasing our trade.

The reduced expenses of transferring the business at a Delaware river depot, accessible by steam power, and of transportation to it, would enable the company, without interfering with its regular dividends, to reduce its charge upon the local traffic, and thus directly aid in developing the resources of our State.

The proposed extension would relieve the crowded thoroughfares of this city from the cars and teams of this company east of the present freight station at Thirteenth and Market streets, and enable the Company to increase the accommodation of the local business by the withdrawal of the through train from that station. The absence of this trade from Market street would also facilitate its use by passenger railroads along or crossing this street.

In the opinion of your Board of Directors, a new impetus would be given to the growth of Philadelphia by the extension of the Pennsylvania Railroad to the Delaware river, tending more to revive our commerce than any other measure attainable at so small an outlay. The cost of transportation to the Delaware river, with the exemption from city rolls, city teaming, or cartage, would thus be reduced so much below that to other Eastern cities, that vessels would be drawn to our harbor for their freights, the difference in

favor of Philadelphia over New York or Boston in the cost of transportation between the West and shipboard, or *vice versa*, would be so apparent that ship-owners or foreign merchants would take advantage of circumstances so greatly to their interest.

A merchant receiving flour at both New York and Philadelphia from the same Western consigner, and selling it at precisely the same rate in each city, returns to the consigner a larger percentage on his Philadelphia than on his New York sales—arising solely from the cost of transportation in favor of Philadelphia; consequently cheap transportation to the river front secures to her a large trade which otherwise she can not obtain, and no doubt vessels will be brought here for the trade thus created. This advantage will not be left unimproved by those controlling the commercial interests of our city.

With the road extended to a good shipping point, where land is not held at city rates, live stock would be brought here in large quantities, and much of the packing at various points in the West might be done here, for our own and foreign markets; reducing, to a certain extent, the price of provisions, and furnishing a large amount of labor to our population, by the extension and increase of facilities already provided for that branch of trade, and the various manufactures indirectly connected therewith.

Inducements would be offered for the erection of flouring mills on our wharves, where grain from the West would be taken from the cars by the same engine that would turn it into flour and pass it on shipboard, thus saving the present expense of drayage to and from the store.

In conclusion your Board of Directors are of the opinion that the Pennsylvania Railroad has not accomplished the object of its construction until a connection is effected with tide-water on the Delaware, thus opening an avenue by which every variety of mineral and agricultural production can be conveyed to a proper point for shipment, and furnishing facilities for the trade of this city, at least equal to those of any location on the Atlantic coast.

Indeed, we can safely assert that the facilities the Pennsylvania Railroad Company could then offer for the transportation of iron, coal, lumber, grain, and provisions to this city, would make it unsurpassed by any other locality as a manufacturing district.

Resolved, That the Board of Directors of the Pennsylvania Railroad Company be, and they are hereby authorised to select the most eligible location on the Delaware river for a terminal depot, to be reached by locomotive steam power, and to cause the extension of the road to the said river, to be completed at the earliest practicable period.

By order of the Board,

J. EDGAR THOMSON, *President*.

PACIFIC RAILROAD.

OBSERVATORY, WASHINGTON, Jan. 4, '59.

My Dear Sir—My last was dated about two weeks ago.

I have often wished that the question, pure and simple, railroad or no railroad to the Pacific could be put to the popular vote of the nation. Never, since the Memphis Convention of 1849, should I have any doubt as to the result: the vote would be largely for the road.

While all admit the importance of one or

more such railroads, there has been such a diversity of opinion as to routes and plans that no one route has as yet met with friends enough to carry it through in spite of its rivals, and I do not think ever will.

Two roads at least are necessary. At least two roads, one at the North and the other at the South, are required for the common defence. At least two roads, one at the South and the other at the North, are necessary socially and commercially; for by two roads so placed the markets of China, Japan, and the Amoor will be brought nearer to us by many days' sail than it is possible for one road to bring them. This may sound paradoxical, yet I hope, before I am done, to explain the paradox to your satisfaction.

Let us first consider the importance of two roads in their military aspect.

Vancouver Island commands the shores of Washington and Oregon Territories; and, whether the terminus of the Northern Road be at Puget's Sound or at the mouth of the Columbia river, the munitions sent there in war could be used for no other part of the coast, for Vancouver overlooks them.

They could not, on account of Vancouver in its military aspect, be sent from the northern terminus to San Francisco and the south; nor could the Southern road, supposing only one, and that at the south, send supplies in war from its terminus, whether at San Diego, San Pedro, or San Francisco, by sea either to Oregon or Washington. Vancouver would prevent; for Vancouver commands their coasts as completely as England commands those of France on the Atlantic. So complete is the military curtain which a juxta island affords to a coast that you never heard of France on the Atlantic sending succor by sea to France on the Mediterranean or the reverse in a war with England. The Straits of Fuca are as close as the Straits of Gibraltar.

In preparing for the national defences of the Pacific this fact, and the circumstance that Vancouver's Island is in the hands of a foreign Power, are well calculated to impress peculiar features upon any system that may be adopted for that coast.

But I promised to explain why two roads—one at the South, the other at the North—will bring the markets of Asia much nearer to us than either road singly would make them. Before, however, I go into that explanation, let us clear away some of the ideal obstacles which error has placed in the way of a Northern route to the Pacific.

Most men of our age were educated under the belief that parallels of latitude and terrestrial climates are correlatives; that we might tell the temperature of any unknown country or region of country if we know its latitude. Humboldt and Dove exploded this idea with their isothermal lines. For example, they show that the mean annual temperature of North Cape, lat. 70° in Europe, is the same as that along the north shore of Lake Superior, in lat. 50°. So here is a difference of twenty degrees of latitude without any difference in the average annual temperature of the two places. There is a difference in the length of day and night at the two places; and, so far as climate is affected by difference in the length of day and night, climate is to that extent and no farther an affair of latitude. But with differences in length of day and night the relations between climate and latitude cease; the thermometer and hygrom-

eter then become the true exponents of climate. Every region, indeed, tells the whole story of its climates by its flora.

Let us get rid, then, of our old notions concerning the relations of latitude to climate, and with unbiased minds lay out this north temperate zone which we inhabit into two grand thermal bands, and then study the flora of these bands. After we shall have done this then I think we will be able to agree, at least among ourselves, as to the necessity of two routes to the Pacific. Moreover we can, by so dividing, select those routes that will be the best agriculturally and commercially; and when we shall have finished with their investigations you will find that these two routes lie exactly where the best plans of national defences requires them—the northern route commencing at the Western boundary of Minnesota and going to Puget's Sound, with a branch in the course of time to the mouth of the Columbia; the southern route commencing at El Paso, in Texas, and going thence to San Pedro or San Diego and San Francisco.

I speak of these routes as the routes which commerce and agriculture as well as war require. The elements indicate them, the country needs them, and the people will have them. I place the climatology of these routes, the agricultural and commercial resources of the regions through which they pass, in the same category, because commerce is based on difference of agricultural productions, and difference of production is an affair of climate altogether. Therefore, in studying climates and routes, we must study variety of production, and can not help looking at them in their commercial aspects.

The Army Meteorological Observations, Blodgett's Climatology of the United States, and Dove's Isothermal Maps enable us to divide that portion of the northern temperate zone occupied by the United States into two grand and characteristic thermal bands. The fauna and the flora of these two bands differ. The people differ, the climates differ, the industrial pursuits in them differ, and therefore I call them grand and striking subdivisions. Speaking in a general way the United States lie between the mean annual isotherms of 35° and 70°. Take a school map of the world and let us draw, with a pencil, these isotherms across Europe, Asia, and Africa also.

Beginning on the west coast with the pencil at Sitka, draw it with a free hand thence through the mouth of the Red river of the North, touching the north shore of Lake Superior, crossing the St. Lawrence below Quebec, and thence to St. John's, Newfoundland. Now, beginning in Europe, near Christiana, draw your pencil up towards the Gulf of Onega, then draw through Oreberg to Kiachta, Marghen, and the mouth of the Amoor. You can now see sufficiently near, for our present purpose, how the isotherm of 35° runs. The mean temperature of all places south of this line is more than 35°.

In like manner we may sketch off roughly the annual isotherm of 70° through the New World and the Old. It starts from San Diego, crossing the Colorado at its mouth, and then passing down through Chihuahua City to Austin, in Texas, it goes by New Orleans and Pensacola to the sea. Striking the African coast near Mogador, it goes through Cairo, Ispahan, Delhi, to Canton. The mean temperature of all places to the north of this line is less than 70°.

Now let us divide the belt included between

these two isotherms into two nearly equal thermal bands, by tracing like wise, with a free hand, the isotherm of 52°, the mean (nearly) between 35° and 70°.

Beginning near Cape Orford, on the west coast, this isotherm passes up towards the Dulles, then down a little to the west of Salt Lake to Sante Fe, then up to Council Bluff, on the Missouri, and then through St. Louis and Louisville to Baltimore. Taking it up in England it passes thence through Belgium towards Zurich, then up towards Olmuts, and so on through Varna, Derbent, Kokan, and Peking.

This line divides this belt thermally and geographically into two bands of nearly the same size. They include the garden spots of the earth. In them man laid his first hearthstone, and from them the lights of civilization and christianity have shed their first and their brightest rays.

Let us, for the convenience of reference, call the northern band the upper band, and the southern one the lower. We are now prepared to cast the eye over them, and to generalize concerning the commercial and agricultural aspects of the two routes.

The plants which give physiognomy to the fields and forests of these bands are for the upper bands, conifers, the willow, the beech, the larch, fir, alder, elm, hickory, birch, cranberries, and pasture grasses. For the lower band, the characteristic plants, are thick-leaved ever-greens, and arborescent grasses, the cypress, cedar, ash, and magnolia, with roses.

The chief commercial plants, besides the cereals, which are common to both, are for the lower band: the orange, the vine, the fig, peach, date, pomegranate, citron, the melon, St. John's bread, the sweet potato, rice, indigo, tobacco, hemp, cotton, tea, sugar, and naval stores. For the upper band: buckwheat, hay, Irish potatoes, turnips, apples, pears, plums, with herds and flock among its fanna.

With these two grand divisions of the temperate zone thus delineated, and with this description of their characteristics, we may proceed to cast the horoscope for that portion of the country which lies between the Mississippi river and the Pacific Ocean. To read its future for present purposes, we have only to glance the eye over the well developed parts of each band, both in the Old World and the New; then we shall see that an upper band railroad to the Pacific is a "fact" which philosophy, teaching by example, compels us to regard as "fixed."

A mere glance at the map of the world will show you that most of the railroads, both in Europe and America, are in this upper band; that in it are the great commercial centers of the world, as New York, Liverpool, London, and the German ports of Europe; that it is to the cities of this band, as Leipsic, Nigni, Novgorod, Kischta, etc., that the people of both Europe and Asia annually resort to hold their great fairs.

Contemplate, also, the people of this band in their industrial aspects, and you will see that it is the ship-building and seafaring region, the home of the fisherman, the sailor's father-land, and the place for factors, factories and operatives.

The industry of this band is marked by minute subdivisions of labor and great diversity of pursuit among its inhabitant—a sure sign that their occupations are, to say the least, not so exclusively agricultural as are

the occupations of those who inhabit the lower band.

After thus drawing our lines and consulting the lights displayed within them, it will, I am persuaded, require no great art of divination to satisfy you that a railroad along this upper band to the Pacific may be looked upon as a "fixed fact." I tell you, one is *obliged to be built there*.

By thus passing these two bands in review, we are further reminded that the people of the north temperate zone, in spite of legislative enactments, tariffs and protection, have obeyed the laws enacted by Nature for the geographical distribution of labor; that according to these laws each band has been occupied and replenished; and that man, though the same in both bands, has in each heeded those physical conditions by which he finds himself surrounded, and directed his labors to those pursuits which promise the best returns.

This circumstance reminds us that railroads feeding given areas in the upper band should be much more apt to have full freights both ways than are railroads feeding like areas in the lower band. The latter carry away tobacco, hemp, cotton, rice, sugar, etc., and may bring back in a single car the manufactured articles for which a whole train load of cotton has been exchanged. Hence, as a rule, railroads in this band carry more than they fetch. The same raw and bulky articles go into the upper band to be manufactured, and when manufactured they are put on the rails for distribution and for market, thus increasing freights for this band both ways.

Each one of these thermal bands in the United States wants its road from sea to sea, and each must have it. Each wanted its system of roads between the Atlantic ocean and the Mississippi river, and each has it whether Congress would or not; and so it will be between the "Grand Ocean" and the Mississippi.

Look at the steel engraved map in Appleton's Railroad Guide, and you will see how these systems of roads have been formed. Until last summer Virginia would stretch no railroad line from any of her fine harbors into the valley of the West. North Carolina had no harbors, whence the blank space on that map between Ohio and Georgia.

On the other hand, there was the great chain of Lakes. Then there was the Baltimore and Ohio and the Pennsylvania Central railroads, which were commenced at a very early day and pushed forward with vigor. Now see what a network of roads those have called out, reaching to and beyond the Mississippi and stretching due east to connect with these.

While Virginia would not and North Carolina could not, South Carolina and Georgia went to work with their system of roads, which has already stretched itself toward the setting sun, far beyond the Mississippi.

Texas has given a most magnificent grant of lands and loan of money to her South Pacific railroad, which will extend the Southern system as far as El Paso, within 600 miles* of the Pacific.

Roads from New Orleans, Vicksburg, Memphis, and other points are to join the Texas road. Memphis and El Paso are in the middle of the lower band. Hence, you perceive, this band has its roads well under way, and it

is high time Uncle Sam should take hold and extend it westward.

Unfortunately, this road has had troubles to an extraordinary degree, "but it is a long night that has no day," and it now begins for the first time to see the light of real day. The dawn is promising.

So, too, in Minnesota. St. Paul is in the center of the upper band, and there is a railroad already under way from St. Paul's to Pembina. A branch from this road leading to the Pacific will most fairly represent the system in the upper band. St. Paul is in the middle of it, and the distance by an air line from the Western limits of Minnesota to Puget Sound is 870 miles, making only (say) 1,500 miles of road to be provided for by the General Government in order to secure both of these roads. Indeed, if the Southern road be taken to the California line, California will take care of it thence to San Francisco; so that, by providing for the construction of some five hundred miles, government can now secure one at the South.

Ten years ago, when this question of a road to the Pacific began first to be agitated, Government would have had to provide for it all the way, from the Mississippi to the Pacific. So it was held, and that would have required a single road about 2,000 miles long. Now Government aid along 1,500 miles will give us two.

These bands give a complete quietus to all objections to the Northern road on the score of climate. In other parts of the world roads abound in just such climates. The road from St. Petersburg to Moscow, and the Prussian roads, with others in the same band in Europe, are even in a higher latitude than the St. Paul will be. Yet climate is no objection to them. Neither is it to the Canada railroads, nor to any others as far north as the rails have been laid. We all expect to see the day when Russia will be extending her system of rails into Siberia; and none of us—for in that matter all of us have unbiased minds—anticipate any difficulty on the score of climate.

Rain maps for these bands show that the average annual amount of rain along this northern route, and until you pass the Rocky Mountain range—after which the climate is mild, like that of England—is less than it is along any railroad in the Atlantic States, or in the Mississippi valley, or indeed in any part of the world. They show that the average amount of precipitations, both snow and rain, in winter for that part of the route which lies between the Pacific range of mountains and St. Paul is less than three inches. Thus I think the question of climate, of terrific snow storms and impassable drifts along this route, may be considered as disposed of.

We return now to the paradox that by these two roads to the Pacific, the markets of Asia will be much nearer to those of the Mississippi valley than either road alone could bring them. To explain this it is only necessary to remind you how the winds blow and the currents set that control the routes of the sailing vessels—the burden-cars of the sea—between the eastern shores of Asia and our West coast.

The route to Asia lies through the north-east trade winds. These winds blow between the parallel 30° north and the equator, and vessels that take this route usually run across the broad Pacific between the parallel of 18° and 25° north, where the trades are strong-

* Geographical miles 0.60 to a degree of latitude.

est. Returning, they take the great circle route—the shortest distance—and keep well up to the north, for now the “brave west winds” of those extra-tropical regions, which would have been adverse for the outward voyage, are fresh and fair for the homeward run. So you perceive that a vessel trading under canvass between our Pacific States and China describes on every round voyage an ellipse. Coming out of the straits of Fuca or the Columbia river, for instance, her course is first to the southward, as though she were bound round Cape Horn, and until she gets into the northeast trade winds. Her course is then west until she enters the waters of the China seas. She then hauls up to the northward and westward for her port. On the return voyage her course, on coming out of her Asiatic port, is to the northward and eastward until she gets fairly within the “brave west winds.” With these she steers to the eastward, following the great circle route, gradually shaping her course to the south of east, until she reaches her own shores again. If she be bound to San Francisco her route, until she gains the offing of the Straits of Fuca, would be the same as though she were bound into Puget's Sound or the Columbia river.

Thus you perceive that on the eastern voyage, San Francisco is on the wayside from Puget's Sound and Columbia river to China, whereas Puget's Sound and Astoria are on the wayside of the route from China and Japan to California.

To see how one road only would work, let us first suppose it at the north—running from St. Paul to Puget's Sound. Let us now follow a package of merchandise—say of ginseng—that is sent over this road from Memphis, to be bartered in China for tea. The ginseng would first go north up the Mississippi to get to the road. Thence it would cross to the Pacific; arriving at Puget's Sound it would then be shipped for China. Now it must come back to the south again to get into the trade winds' region. Thus you observe it would have to go more than a thousand miles up the Mississippi out of the way; and when it reached the Pacific it would have to return again as far to the south and farther than it was when it started. Being exchanged for tea in China, it would be the nearest for the tea to stop at Puget's Sound, take the Northern railroad and come south on the Mississippi, instead of coming south by sea along the Pacific coast.

Now, let us, in imagination, place the road at the south instead of at the north, and take a bale of furs to illustrate the route of trade, and travel from the upper band. The fur, we will suppose, is sent from St. Paul. It comes down the Mississippi to get to the road; that would not be out of the way for the fur, for it is bound south for the northeast trade winds at any rate; and it would be, in a national point of view, perhaps more desirable to have it go south by the Mississippi than by sea on the Pacific. But when the silk, for which it has been exchanged in China on St. Paul account, arrives on its return off the entrance of the Straits of Fuca, it has to turn out of its way. Instead of finding railroad transportation to take it through from Puget's Sound across to Minnesota it has to run away to the south. Perhaps a week after it might have been in St. Paul by a northern road it arrives by sea in California and is carried by rail to Memphis. Now it has to double upon itself to go north and recross every parallel of

latitude that it crossed after turning out of its way from Juan de Fuca. This doubling will require two or three weeks of time, besides much additional risk and expense.

With two roads there will be no doubling; hence two roads will bring China and Japan and Russia very much nearer to the Mississippi valley than one can do. The distance saved will be in furlongs nearly twice the length of the Mississippi river and in time some two or three weeks. Whether the government, therefore, aids in the building of these roads or not, these circumstances will of themselves call for the construction of at least two roads to the Pacific, one at the North, the other at the South. Northern capital and Southern capital will assist in both.

I have thus endeavored to make clear the paradox with which I set out, and I hope I have succeeded in showing to your satisfaction that at least two railroads, one at the North, the other at the South, are required to the Pacific. They are commercial necessities.

There are no toll-houses on the Lakes, and none on the Gulf of Mexico. The Commercial voice of these two waters, could it be heard, would be raised each trumpet-toned in favor of these two roads.

The nearest way from Brazil and the Amazon, as well as from the West Indies, to China, would then be by the South Pacific Railroad.

I did not intend to write you so long a letter, but the interest I feel in the subject of it has carried me away.

I intended to pass with you the compliments of the season, and to wish you and yours a happy new year, and ask you to believe me yours truly,

M. F. MAURY.

D. A. ROBERTSON, Esq.
—National Intelligencer.

REPORT.

To the Board of Directors and Stockholders
of the Santa Rita Silver Mining Company:

In submitting the following Report of the progress of the Company's Train en route to the Silver Mines, your agent feels deep regret that the unavoidable detentions on the road have prevented the realization of an anticipated early development of the undoubted rich resources of the mines. A brief account of the leading incidents of the journey, together with observations on the nature of the country through which we have passed, and the obstacles encountered, will enable you better to appreciate the causes which have tended to retard our progress:

The main portion of the Company's property, constituting the outfit of the expedition, was shipped at Cincinnati on the 15th of July last, for Port Lavaca, Texas, where, after reshipment at New Orleans, it arrived on the 9th of the following month. There a delay of a fortnight occurred in breaking wild mules, arranging the freight, and completing the preparations for a lengthy overland journey. Your agent, detained at home by business of the Company which required his personal attention, did not join the Train until its arrival at San Antonio. The shoeing of mules, inspection of wagons and freight, hiring of competent drivers, and the purchase of additional supplies, consumed near a fortnight, and it was not till the 20th of September that all was in readiness for a journey through the wilderness. The train consisted of ten large wagons, an ambulance, or covered spring-wagon for invalids, eighty-two mules and horses, thirty-one men, and two ladies. It was subsequently found necessary to purchase additional animals, which increased the entire complement to ninety-one. In the early part of our journey, traveling in a warm climate, with long intervals between the watering-places, and exposed to the scorching heat of an almost tropical sun, our progress was very slow. It was only by short drives and long rests that we could save our mules, and though anxious to push forward, it would be at the sacrifice of animals that could not be replaced.

On the 27th of September crossed the Nueces River, one of the most considerable streams of Western Texas, rising about fifty miles above the point where the road crosses it, and flowing south-west into the Gulf of Mexico. After crossing the Nueces, the face of the country entirely changed.

Mesquit ceases to be the prevailing timber, and elm, pecan, oak, and other trees, with their unequalled verdure and varied hues, relieve the scenery of its monotony, and render it more picturesque. The contrast is still more striking in the gradually increasing altitude of the land, giving evidence that we are approaching the high table lands and mountainous regions of Texas. On the south of the river, within a few miles of the river, is a chain of hills, or what in Texas, where so much prairie land prevails, would be called a mountain range, with an altitude of about three hundred feet. From the Nueces westward, through the entire length of the journey, the traveler scarcely loses sight of mountains. Aside from the few traders domiciled in the immediate vicinity of the military posts, there is but one settler between the Nueces and the Rio Grande. The wiley savage far infests this region, and constant vigilance is necessary to guard against a surprise. Sentinels were nightly placed over both camp and herd, and in particularly dangerous localities, double watchtowers were set. Each member of the party, fully armed and equipped, had his position assigned as an escort to the train while under way, with strict injunctions not to, at any time, wander over one hundred yards from the train, without leave. To these wise precautions, your agent firmly believes, is attributable the safety of our journey. The Indians, who were doubtless frequently observing us from secret hiding places, seeing the constant vigilance of our camp, withdrew from potential motives, and left us to pursue our path through the wilderness unmolested.

At Fort Clark, the first military station on the road, we were treated with great courtesy and attention by the commandant, Capt. Oakes, who very hospitably invited the entire party to remain at the Fort several days, offering us, at the same time, comfortable quarters facing the parade ground. Though fully appreciating the great kindness of this gallant officer, your agent felt it imperative upon him to push forward with all prudent dispatch, and declined the invitation so cordially extended. At all the other posts on the line, we were treated with that open-hearted hospitality for which the army is distinguished, and received with a cordiality that made us loth to depart.

Reached Devil's River, forty miles west of Fort Clark, on the 1st of October. The country between is wild and rolling, poorly timbered and watered. Near the river it is somewhat hilly and sterile. The scenery at the crossing is of the most pleasing and picturesque description. Huge cliffs of gray rock line its either bank, their almost perpendicular sides towering to a great height above the water, while the tortuous road winds down a steep ravine, and over a bed of solid rock, in the water. Its beauty is almost beyond description; the pure, limpid waters, almost silvery in the glowing sunlight, rushed over a rocky bed, smooth almost as a ball-room floor. It was nowhere over one and a half feet in depth. For several miles after leaving the river the road was very hilly, but the scenery of the most striking character. Deep canons reared their sides upward, exposing to view blue and gray calcareous rocks, at times resembling in their regularity and boldness of outline, some old Baroque Castle of the Middle Ages. As we advanced scarcely a tree was to be seen, and only thorny shrubs, Spanish Bayonets and Yucca disputed with the grass for possession of the soil. Fort Hudson is situated at the second crossing of the river. We remained in the vicinity for near a week in order to allow the mules to recruit, and for the purpose of shoeing such as needed it. During this time we exchanged hospitalities with Capt. Blackett and his officers, and had an excellent opportunity of acquainting ourselves with the peculiarities of the Devil's River country. Dense thickets line the road at intervals, making it an excellent hiding-place for Indians, and it is one of the most dreaded portions of the road. The river sinks into the earth a short distance below its source, and flows in a subterranean channel for about ten miles, when it again bursts forth, and runs in a sufficiently course for about eighty miles, emptying into the Rio Pecos. Between Camp Hudson and the head of the river, the road crosses the channel thirteen times. Five times over the water, and the remainder over dry beds, which are only full at high water. The river is skirted the entire distance with high hills or mountains, and most of the way is quite stony.

For the first ten miles after leaving the head of Devil's River, the road gradually ascends, winding through valleys, until it emerges into open prairie or table land on the summit of the ridge. It was on this part of the route that one of the most exciting incidents of the journey occurred. It had been cloudy all day, and as we started from our noon encampment, appearances at the North indicated an approaching storm. We had proceeded but little over a mile, when the storm burst with fury full on our faces. All the animals seemed terrified, and the drivers were immediately ordered to form a corral facing westward, as to proceed in the face of the storm was impossible. The wind blew fiercely, and large hail-stones poured down in myriads. The heavens glared with vivid flashes of lightning, and loud claps of thunder reverberated through the air. It was out of the question to restrain the panic-stricken animals, and as the loudest command given at five paces distant could not be heard above the driving storm, the teamsters hastily unharnessed their mules and left them to themselves. At first they dashed wildly away, but soon gathered in a cluster and returned to camp. It is a strange but noticeable fact, that all animals once domesticated seek to acknowledge the superiority of man in the hour of danger, and fly to him for protection and assistance. All who had not encased themselves in rubber coats were drenched to the skin, and after dispiriting of their horses, they mostly stood in a group at the head of the corral, admiring the fierce aspect of Nature, as peal after peal of Heaven's artillery succeeded the forked lightning's flash. Night was rapidly approaching. All at once the dusky hue of twilight was dispelled by the lurid glare of a flash more prolonged, more dazzling than before, followed by a stunning clap of thunder which prostrated most of the party. The electric fluid had struck in the midst of our camp! One gentleman of our party,

Mr. E. E. Cross, and a Mexican herder were slightly paralyzed the former becoming derelict, but both receiving immediate attention from Dr. Hughes, were almost entirely over their effects by morning. Strange to say all others escaped uninjured! Our escape was doubtless owing to the great amount of iron and fire-arms among the party, and in the train, which, by attracting the fruit in numerous currants, diffused it into too small quantities to result in further danger.

Three days' journey over a rolling country, destitute of timber, poor grass, and several orifice dog towns by the way, brought us to Fort Lancaster. This post is reached by descending from the table land to the valley, perhaps three hundred and fifty feet below. The descent is over a very precipitous road, and the Fort is not visible till half way down the winding highway. The valley is most desolate and cheerless in appearance. Crossing the limpid waters of Live Oak Creek, a four mile's drive brought us to the bank of the dark and turbid Rio Pecos, which we forded the next day. It is a muddy, brackish stream, current very swift and banks steep. It rises far to the North, near Santa Fe, and flows in a south-easterly direction, emptying into the Rio Grande about sixty miles below Fort Lancaster. Our course led along its bank for thirty-eight miles, when the road leaves the basin of the river, and flows almost due west. Before reaching this stream all the rivers and brooks of Texas had been remarkably pure and clear. From the Pecos to Fort Davis, most of the water was strongly impregnated with sulphur and other minerals, which somewhat affected both men and animals. The country for one hundred and fifty miles west of Fort Lancaster presents little to gratify the eye. There is comparatively no timber, the scenery is monotonous, and thorny bushes abound. Though we have many beautiful views of mountain scenery, there is nothing striking or bold. The vegetation kingdom presents nothing but dwarfed mesquit and cat's-claw bushes, intermixed with several varieties of cacti, which are all covered with thorns, and constantly interfere with one's comfort. The mineral kingdom is equally unproductive of curiosities; game is scarce, and altogether it is one of the most uninteresting spots on the route.

While at Camanche Spring, fifty miles west of the Pecos, the camp was alarmed about dusk by a strange horse rushing into the herd, and almost stampeding the animals. This device is frequently resorted to by the Indians, in order to create a panic among stock upon which they have designs, taking advantage of the confusion ensuing to secure and drive off part of the herd, and we all flew to our arms, ready for any emergency. Mr. Wilkins, the train-master, shot the intruder, as the only means of saving the herd, and as it flew over the prairie, disappearing in the distance, a bloody trail, gave evidence that the shot had taken effect. The guard was doubled, and other precautions taken, as this was a noted rendezvous of Indians, but the night passed without further alarm. The horse had probably strayed from some train passing before us, as there were no indications in the morning of the vicinity of Indians.

At Leon Hole, ten miles westward, we found four newly made graves by the roadside. A rough board, with an inscription rudely cut out with a knife, marks the spot. It reads as follows: "M. W. Huxford, of Ohio, and John Christy, of Minnesota, killed by Indians, August 9, 1858, and two Mexicans. All died fighting." They belonged to a cattle train upon which the Indians made a descent, and their force being inadequate to repel the attack, many of the cattle were driven off, and these four men slain in the encounter. We found a piece of paper near the spot, bearing date a few days later, warning travelers that Indians were in the vicinity. It was doubtless left by the surviving comrades of those who were "sleeping the sleep of death."

From Barrilla Spring, sixty miles east of Fort Davis, to the Fort, the country is mountainous in the extreme. On the 24th of October, having halted, as was our custom whenever practicable, for a due observance of the Sabbath, a party under your agent's leadership resolved to ascend a high mountain peak in the vicinity of our camp. We were then encamped in Limpia Canon of the Sierra Diablo, at the Wild Rose Pass, one of the most romantic spots on the entire route. The party consisted of your agent, Dr. Hughes, and Messrs. Van Rensselaer, Potts, Turner, and Jones. We attained the summit, which has an altitude of at least eight hundred feet above the base, after a toilsome walk of two hours, where, after erecting a flag, we reclined upon the grass and surveyed the scene before us. It was truly magnificent. The camp we could descry through a spy-glass, but to the naked eye it seemed only a small, white clot. The summit was nearly level, and the entire area, which was several acres in extent, was covered with vegetation. Mountain cedars and live-oak trees, with every variety of the plants peculiar to the country, were seen. The view from every side was grand. We could distinctly see mountains known to be seventy-five miles distant, and the ridges and mountains in our vicinity, with the lovely variety of valleys and jagged peaks, rendered the scene very picturesque. We remained on the summit about two hours, when we proceeded to descend. Around the top was a huge wall of jagged and irregular black rocks, of most striking boldness, which surmounted the peak like a crown. The passage of this natural fortification was effected through fissures in the rocks, and was only accomplished with considerable labor. Descending perhaps two hundred feet, Capt. Jones suggested that by taking a gorge which he pointed out, we would perhaps reach the foot of the mountain more speedily than by retracing the route by which we had come. Accordingly, under his leadership, we commenced the descent, and soon found ourselves in the midst of the wildest scenery imaginable. Huge black rocks jutting out in fantastic shapes, lined both sides of the gorge, and the descent was only accomplished at times by crawling on all fours, or sliding down the plane. For, perhaps, two hundred feet, we continued our downward course, meeting with obstacles at every step, till we found the cavity open wider, and a large natural basin worked in the solid rock, led the opening. The pure cold fluid was over eighteen

inches in depth, and from its limpid waters we took a long and refreshing draught. We accomplished the passage of this impediment by swimming with much dexterity around its slippery and perpendicular sides. Thirty feet below we found another fountain, and while at its base, Capt. Jones, who had gone on, cried out that we could proceed no further. A huge precipice terminated the path which we had chosen. I descended to the brink, and looking over the crazy height, saw the bottom at two hundred and fifty feet below. We threw over some several large stones, and listened some seconds ere the dull heavy sound of its fall into the rocky bed of the precipice reached our ears. We were now in a critical position. We had once paused to consider the propriety of retracing our steps ere it was too late, but all seemed anxious to go on, and this was the result. I looked again over the yawning gulf, and at the lofty black, rocky crags overhead for two hundred feet. We could not return by the path we had descended—was there any other? Or must we be doomed to die in this drear solitude, our fate forever wrapped in mystery! We scanned the rock-ribbed sides narrowly, and concluded that a fissure, which intersected the one we were in, and which we noticed by the fountain as we descended, was barely practicable. As it was our only alternative, we commenced the ascent. The trial was one of imminent peril, and it required constant watchfulness to avoid dropping the loose stones on the heads of those below. Once, one of the forward loosened a large clump as he removed his foot from the insecure foundation, and it rolled and tumbled downward, startling us all, and filling us with anxiety for those below. But no one was hurt, and after considerable exertion we all reached the top, in safety, feeling that we had escaped from a very perilous adventure. Not finding this peak designated by any name on the map of the country, I have called it "Capital Mountain," from the resemblance it bears to the rotunda of the Capital at Washington.

We were now in a very elevated region, the road for a long distance having an altitude of four thousand five hundred feet above the level of the Ocean. At Fort Davis, Col. Sewall, the commander, very kindly presented us with a variety of fresh vegetables from his private garden, which proved very acceptable to our party. After leaving the Fort we experienced a great scarcity of wood, with long drives between the watering places, until we struck the Rio Grande. Mesquit entirely disappeared, and we were dependent upon the stalks of the yucca, and the trunk of the Spanish Bayonet for fuel. Some of the latter were not less than eighteen inches in diameter and twenty feet long, but so light that a child could readily carry one. In order to obtain water for the animals, we were obliged to make forced marches over this part of the road which extended far into the night. The advancing season rendering it very cold, our teamsters were wont to set fire to the huge trunks of the Spanish Bayonet as they grew by the roadside, and warm their benumbed fingers. As these wayside fires would burst forth on the darkness of night, dispelling the gloom, and casting a lurid glare upon all around, the effect was very fine. The mountains in this region are rich with minerals, and are well worthy of an exploration at the expense of Government. Indeed, minerals abound in every ridge from this point to the Santa Rita Mountains of Arizona, and will, at some future period, prove no trifling source of its importance.

The road leading up the valley of the Rio Grande, unlike that previously passed over, is extremely sandy, and very trying to mules. The forced marches we had been compelled to make since leaving Fort Davis, had enervated our stock to such an extent, that they were found very unfit for service over a road of this description. After a week spent in arduous drives, averaging but seven and eight miles per day, frequently doubling teams to make even this mockery of progress, we were compelled to cease our efforts entirely, and give the animals an opportunity of recruiting. By this judicious measure, although it consumed much valuable time, that your agent felt could be illly spared, we were enabled to reach El Paso with the loss of a single mule, which, falling into an *acqueria* or irrigating ditch, on a very cold night, became too much exhausted to keep up with the train, and was left by the roadside.

Your agent would have been pleased, had not the length of this Report rendered it inexpedient, to enter into a description of the most prominent trees and shrubs, peculiar to this section. Some, from their singularity and utility, form a very interesting study for the Botanist. A future paper may be prepared on this subject, and forwarded to your office.

We were detained some days at El Paso in replenishing our depleted larder and all things being in readiness, we started forward on the 19th of November. As the remainder of our route is almost entirely through the proposed Territory of Arizona, the field of our future operations, your agent will allude to it in a separate Report.

The Odometer, which we found very useful in noting our daily progress, has been attached to the ambulance, the entire distance. The figures vary materially from the Table of Distances adopted in Government surveys by the San Antonio and San Diego Mail Company, but careful comparisons at the points where discrepancies occurred, revealed glaring errors in the figures of the latter, and leave no doubt in the mind of your agent that our figures are much more reliable.

TABLE OF DISTANCES.

From San Antonio to Fort Clark.....	127.81 miles.
Fort Clark to Camp Hudson.....	77.92 "
Camp Hudson to Fort Lancaster.....	92.17 "
Fort Lancaster to Fort Davis.....	127.6 "
Fort Davis to Fort Quitman.....	133.92 "
Fort Quitman to El Paso.....	75.98 "
Total.....	675.90 "

AMERICAN TRADE.

The United States, situated as they are with regard to the countries of this Continent, have hitherto enjoyed but a small portion of the actual traffic which should naturally grow out of the growing prosperity. If we take a table of the area, population and trade of all the settled countries of America, North and South, according to the most recent authorities, we have results as follows:

	Area. sq. miles.	Popula- tion.	Trade. mils.
United States.....	2,967,666	27,237,310	9.19
North & Central America.....	5,343,399	13,037,629	4.99
West Indies.....	96,150	3,911,965	40.71
South America.....	6,767,401	19,973,633	2.93
Total.....	15,170,516	64,147,677	4.24

	Exports. \$343,644,421	Imports. \$3,699,065
United States.....	\$343,644,421	\$3,699,065
North & Central America.....	74,694,671	85,512,361
West Indies.....	78,445,761	71,271,637
South America.....	145,219,350	132,758,927
Total.....	\$642,769,203	\$268,542,771

These figures give the whole extent, population, and commerce of all these countries, but the interchange is mostly with other countries than with each other. Under the colonial policy, by which the early trade of all of them was settled, the products of each were directed to the respective mother countries, whence alone they could draw supplies. As the connections with European countries were during the present century successively cut off, England was indefatigable in her exertions to obtain the best footing for trade, and to supplant other countries in the supply of goods to the emancipated colonies, hence the last 50 years has been one scene of intrigue and meddling along the coast, North and South. Where she could not contract or monopolize the trade, she has sought to break it up by intrigue, right of search, and other pretenses. The result is that the United States have got but a very small portion of the trade. The proportion of the whole trade of those countries which has been obtained by the United States, is seen in the following table:

	From U. S.	Elsewhere.	Total.
N. A. Colonies.....	\$2,700,478	\$32,811,667	\$55,512,165
West Indies.....	25,966,344	45,275,291	71,241,635
S. America.....	13,453,417	119,312,810	132,766,227
Total.....	\$72,120,239	\$217,399,766	\$289,520,005

	To U. S.	Elsewhere.	Total.
N. A. Colonies.....	\$18,758,811	\$53,664,270	\$72,423,081
West Indies.....	14,661,963	59,980,798	74,642,761
S. America.....	27,894,136	117,325,224	145,219,360
Total.....	\$61,314,890	\$221,970,292	\$283,285,182

These figures were for the year 1855. It appears that all those countries derived from the United States—the nearest source of supply—only one-third of the imports, and they exported to the United States a less proportion of their products. Nevertheless during the changes which have taken place in the last 20 years, this continental trade of the United States has increased, owing to the operation of the proclamation opening the West India trade, the modification of the duties, the establishment of the warehouse system, and improved treaty regulations like the reciprocity with Canada. If we compare the trade between the United States and those countries for the year 1835 with that of 1855, we have results as follows:

	Imports into U. S.	Exports from U. S.
1835.....	\$9,935,68	\$9,699,226
North America.....	\$9,935,68	\$9,699,226
West Indies.....	11,331,356	1,457,935
South America.....	5,494,415	\$9,939,607
Total.....	\$26,761,459	\$20,096,768

1855.	Imports into U.S.	Exports from U.S.
North America.....	\$18,753,891	\$2,740,458
West Indies.....	18,611,963	25,976,346
South America.....	27,799,136	13,453,417
Total.....	\$65,164,990	\$2,132,231

Thus although in the lapse of twenty years the trade of the United States with American nations has rather more than doubled, it still bears but a very small proportion to the capabilities of those countries, but it will be remarked that the largest increase by far has been in the period named with Canada; under the Reciprocity Treaty, which has largely increased the sale of Western produce. That treaty and its operation strongly indicates the advantages to be derived from similar treaties with the other nations of the continent. With the South American States the United States do barely 10 per cent. of the trade, but with the West Indies the trade has undergone an immense development, under the high prices which sugar has maintained in the last few years. In 1857, the imports into the United States from the West Indies reached \$56,917,099, against \$25,976,344 in 1855, and \$11,332,356 in 1835. This large increase was mostly from Cuba in the shape of sugar, but the returns were by no means as large. The apparent balance against the United States in 1857 with respect to the West Indies was nearly \$30,000,000, drawn for against American credits in London, while the merchandise of those countries was drawn from Europe. The United States manufacturers can compete very successfully with those of Europe where they appear on the same footing, as in China, and there is no reason why they should not supply all that description of goods to the American population, which amounts to \$37,000,000 out of the United States, and who should consume as much cotton cloth as the people of the United States, viz: equal to 800,000 bales of cotton. The operation of steam, of railroads, and telegraphs, must tend to bring in closer connection the people of this continent, and develop an immense trade in the train of United States enterprise.

LONDON TO AMERICA IN 110 HOURS—IRON SHIPBUILDING ON THE TYNE.

We are glad to learn that the Atlantic Royal Mail Steam Navigation Co. (Galway line) have given their first contract to Messrs. Palmer and Allport, steamship builders, of Newcastle-upon-Tyne, for three powerful express steamers, which are promised to be superior to any afloat, and to have a guaranteed minimum speed of twenty statute miles per hour. This order far exceeds any other that has been undertaken in steam navigation, and it is impossible to exaggerate the importance of it to this locality. The length of these vessels (which are to be paddle-wheel steamers) will be 330 feet, and breadth of beam 38 feet; their engines will have three oscillating cylinders, each 75 inches diameter, and upward of 2200 indicated horse-power. They are intended to run between Galway, St. John's, and New York, and to convey only passengers and mails. The minimum speed, as it has been stated, will be twenty miles per hour, in smooth water, although more is anticipated; and, no doubt, the distance from Galway to St. John's, in moderate weather, will be accomplished in from four to five days. The size of the steamers will be better understood by the parties in this locality when we mention that they are nearly twenty feet

longer than the Hudson and Weser, the two splendid screw steamers lately launched at Jarro, from the yard of this enterprising firm; but these vessels only attain a speed of 17½ miles per hour on a trial made before they received any cargo. The accommodation is intended to be of the most complete description, the first saloon being intended to dine 200 passengers; and the berths will be fitted to accommodate 300 third-class passengers. This immense undertaking will give employment during the next year to upward of 3,000 men at Jarro, alone, and in addition hundreds will be employed by Messrs. R. & W. Hawthorn who, with Messrs. J. B. Palmer & Co., have the building of the huge machinery to propel these floating monsters. We congratulate Messrs. Palmer & Allport on their success in the competition for this large contract, which it was well known was very great from the Clyde and other places; and after the magnificent productions which have lately been launched from their building-yard, it is not too much to say that it could not have fallen into safer or more competent hands. When these vessels are placed on their line, the distance to America will have to be reckoned by hours instead of days as heretofore. The London & Northwestern Railroad Company have undertaken to convey the mails from London to Kingston in eleven hours; thence to Galway will occupy three hours more, and if we take the sea voyage at four days, as we believe may be safely done, America will be reached from London in 110 hours! This seems marvellous indeed, but will be accomplished beyond all doubt; then who will not visit the western hemisphere, and see his Yankee cousins in their own country!—*Newcastle Chronicle*.

MONETARY AND COMMERCIAL.

The only noticeable features since our last issue are a slightly increased demand for money, during the early part of the week, which is the case near the first of every month. In consequence of the anticipated repeal of the ten per cent. law in this State, there has been considerable inquiry for paper secured by real estate, having long time to run. This class of securities for some time past having been entirely ignored by lenders, there is but a very limited amount of it thrown on the market, hence some difficulty is experienced in making satisfactory investments.

In Eastern Exchange there has been a somewhat better supply, although not more than enough to meet the current demand. Rates same as heretofore quoted ¼@%. Of New Orleans, the Cincinnati Gazette says:

"Sight was offered freely outside, and the grocery houses were able to supply themselves fully at one prem. The sales of provisions on Southern account have been large, within the last few days, and as this movement continues, an easier market for Southern checks than has heretofore been experienced, may be expected, for the present at least, which will check the current of coin in that direction. It is estimated that about \$400,000 in gold has been shipped from this place to New Orleans, within the last two months."

SOUTHERN PACIFIC RAILROAD.

We have seen a letter from Marshall, Texas, from a reliable source. All is right there. The parties are all engaged in ascertaining the debt to be paid. The means are provided to discharge the whole debt as soon as it is ascertained. The business is probably done before this time, and the road is in possession of the stockholders. No difficulty was anticipated. The letter was written on the 17th ult. Great interest is felt here on this subject, as so small amount of the stock is owned in this vicinity.—*Louisville Democrat*.

We annex the following quotations from Hewson & Holmes' Stock Circular:

The tendency to increase in prices of first class Stocks and Bonds, noticed in our last report has been realized. The ad-

vance has been marked by a firm and healthy feeling on the part of purchasers, and the spirit manifested denotes a growing confidence that investments in this class of securities, at present rates, must prove highly remunerative. At our quotations, the market closes very firm with indications of a further advance.

Little Miami shares have reached as high as \$3½, being 1½ per cent. over prices noted in our last issue. Indianapolis & Cin'ti, 55. Cin'ti, Hamilton & Dayton, 55; Columbus & Xenia, 82½. Farmers' Bank, Ky., 125.

We quote the Bonds of the Little Miami Co. at 84½@84½. Cin'ti, Hamilton & Dayton 2d mortgages at 78 to 80. First mortgage of the same Co. at 90 and int., for more particular quotations we refer to our list above. The earnings of the Little Miami Co. for the month of January, just passed, exceed those of the corresponding month of 1858, by \$15,600.

The position occupied by the Bank of the Ohio Valley, lately established in our city, and the influence it has already exerted, to the benefit of our business men, induces us to call attention to it and give some facts concerning it. This institution commenced business in Sept. last upon the plan of the Suffolk Bank, Boston, upon a Capital of \$51,000, of which \$34,000, was paid in: it has resolved to increase its capital to \$500,000, of which \$300,000, is offered in Cincinnati, and will be taken. \$150,000, will be offered in New York and other Eastern Cities. It has already a special Bank Deposit of \$306,000, from Associate Banks in Ohio, and has sold \$3,300,000, Exchange on Eastern Cities, and has returned \$2,700,000, Bank notes for redemption; it has a current deposit besides of \$440,000. Its managers feel confident its Exchange business will pay its expenses, and its discount line will give good dividends to the Stockholders. With but one other Bank in our city, with its 225,000 people, ranking as third city in the Union, we see no reason why this enterprise should not succeed beyond the expectations of its managers.

The market for Eastern Exchange is working easier, without, however, any change in rates; sight drafts are still quoted at ½ buying and ¾ selling with all parties, except the Bank of the Ohio Valley and Commercial Bank, who still draw for ½ prem. Sight on New Orleans is firm at ½ to 1 prem. Gold in active request at ½ to ¾ prem.

GREAT WESTERN RAILROAD.—The following is the Traffic for week ending 21st of January, 1859:

Passengers.....	\$14,859 86
Freight and Live Stock.....	11,869 49
Mails and Sundries.....	1,366 63

Total.....\$28,095 97

Corresponding week of last year.....\$38,933 72

HENRY SHACKEL.

Auditors Office, Hamilton.

CINCINNATI STOCK SALES.

BY HEWSON AND HOLMES,

February 2, 1859.

BONDS.

\$12,000 Little Miami R. R. Co. 6 per cent.	
1st Mort. Bonds.....	84½
\$3,000 Little Miami R. R. Co. 6 per cent.	
1st Mort. Bonds.....	84½
\$5,000 Cov. & Lex. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	50 and int.
\$5,000 Cin., Ham. & Day. R. R. Co. 7 per cent.	
2d Mort. Bonds.....	78
\$2,000 Cin., Ham. & Day. R. R. 7 per cent.	
2d Mort. Bonds.....	80
\$1,000 Cin., Ham. & Day. R. R. Co. 7 per cent.	
1st Mort. Bonds.....	90 and int.
\$1,200 Col. & Xenia R. R. Co. 7 per cent.	
Div'd Bonds, due '66.....	90½
\$4,000 Mason Co., Illinois, 8 per cent.	
Bonds, due in 1877.....	50
\$10,000 City of Dayton 7 per cent. Bonds.....	90
\$1,000 Indianapolis & Cin. R. R. Co. 7 per cent.	
Dividend Bonds.....	75
\$2,000 Ohio & Miss. R. R. Co. 7 per cent.	
Construction Bonds.....	24½
\$950 Little Miami R. R. Co. 6 per cent.	
Dividend Scrip.....	81½

STOCKS.

100 Shares Little Miami R. R.....	82
161 " " " " " " " " " " " "	83
150 " " " " " " " " " " " "	83½
20 " " " " " " " " " " " "	83½
100 " Indianapolis & Cincinnati.....	5½
28 " " " " " " " " " " " "	55
40 " Cin'ti., Ham. & Day.....	55
56 " Columbus & Xenia.....	82½
25 " Farmer's Bank, Ky.....	125

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FOR

Coupling the Ends of "T" Rails.
PATENTED, NOV. 22, 1858.

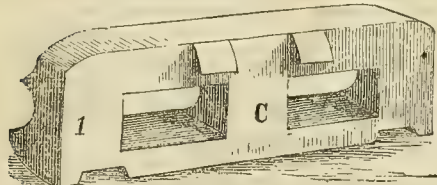


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

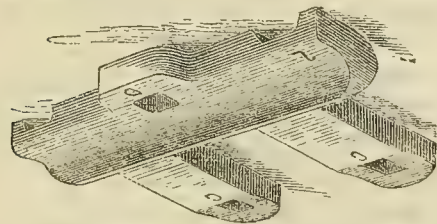
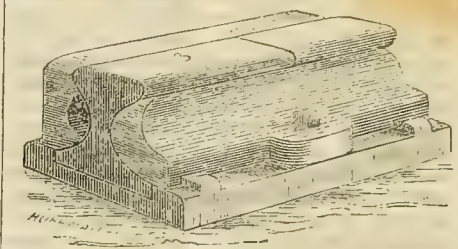
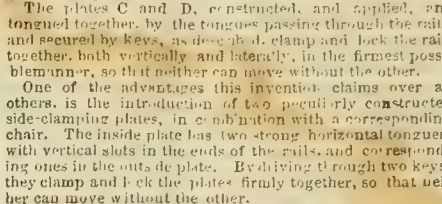


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive the keys, which are driven through them and are secured by the slots in the chair. The rails and chairs are secured to the joint by spikes passing through the flange and down the edges of the base of the rails, in the usual manner and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and secured together by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other. One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered just improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfectly safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

W. HARVEY, INVENTOR AND PATENTEE,
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Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can give us a call, as all our work is warranted, and we ask no pay on it until the work is done and approved, payments being secured on contracting.

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ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Colwin, Xenia, and London

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The NIGHT EXPRESS Train leaving Cincinnati at 11:30 P. M., runs daily, except SATURDAYS. The other trains run daily, except SUNDAYS.

FOR THROUGH TICKETS

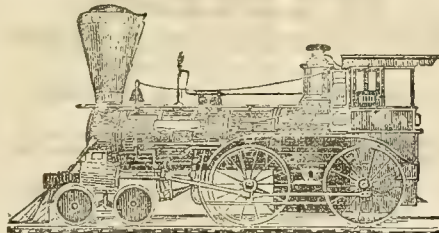
And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

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Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS:

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains east and west; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, and points on the B & I. Road

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:30 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette. Terre Haute, St. Louis, and all Western cities. Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, all ware cut on.—For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Cleveland for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:30 P. M. Dayton Express, for Sandusky, and all points on that road. Connects at Erie with train for Pittsburgh, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & T. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburgh and the East.

5:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the Southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Patent Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Lin. Shingle Machines, &c.

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PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.

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Locomotive Works,

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THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

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AND TENDERS, AND

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generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER WILKINSON, Supt. And by

N. B.—We have two Freight Engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 29 inches stroke. Driving wheels 44 feet diam. December 18th, 1858.

D. M. CARHART,
TURN-TABLE BUILDER.

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them. Whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builders.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address, Respectfully Yours,

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Box 183 Cleveland, Ohio.

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Mathematical Instrument Makers

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CINCINNATI O

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MOTIVE
AND CAR
SPRING

MANUFACTURED BY WASHINGTON, DEL.

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to
McDANIEL & HORNER.All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.
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Mar 19.

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga

THOMAS DOUGHERTY, Master Mach. do.

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To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

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TUBULAR RAIL.



Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Cincinnati, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

Its durability superior.

Unlike other new forms of rail, it can be put down on the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars

addressing E. W. STEPHENS, Cincinnati Ohio.

June 17.—1yr.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,

SOLICITOR OF PATENTS,

And Consulting Engineer,

No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 100 lbs. per yard, "Eric" pattern, of best quality Welsh make, now ready for delivery, for sale by

March 1858.

Feb. 25, 1858.

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9 South William St., N. Y.

HOYT'S WATER GAUGE



Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is peculiarly designed and adapted. From the fact of its indications showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,



WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855.—1yr

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, FEB 10, 1891.

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MARIETTA AND CINCINNATI R. R.—At the annual meeting of the M. & C. R. R. Co., held in Chillicothe on Wednesday, the old Board of Directors were unanimously re-elected, and Melvin Clarke was elected to fill a vacancy in the old Board. Over 34,000 shares were voted, representing one and a quarter million dollars.

The Board re-elected its old officers, viz: Wm. P. Cutler, President; Beman Gates, Vice President; and Wm. S. Nye, Secretary and Treasurer.

SOUTHERN PACIFIC RAILROAD.

MARSHALL, TEX., Monday, Feb. 1.

The compromise failed. The amount of unobjectionable claims has been reduced \$148,000, leaving \$80,000 for further examination. President Fowlkes refused payment unless the road be delivered to the old company under a final award. The arbitration committee therefore resigned, giving the award in favor of the new company. The convention, however, resolved that Fowlkes take possession of the road west of Marshall.

MISSOURI RAILROAD.

A dispatch from Jefferson City to the St. Louis Republican of Saturday, says:

The Senate Committee on Internal Improvements reported several bills, one giving the Pacific Railroad \$3,500,000 to complete it; another changing the Southwest Branch Bonds from guaranteed to State Bonds, and another to protect the credit of the State by putting all the bonds yet remaining of the \$30,000,000 into the Sinking Fund for the payment of interest.

These bills were made the order of the day for Monday next. The bills are very complicated, and attempt to legislate for the corporation, going into details, which belong to the Board of Directors.

RATHER SEVERE.—The New York *Tribune* says: The great Railroad companies having lately agreed with each other to grant no free passes, we learn with surprise that all the railroads of this State continue to bestow free tickets on the members of the Legislature just as they did before that agreement. This is done under a reservation which allows the companies to *pass their own employees*.

No. 51—Vol. 6.

COMMERCE AND NAVIGATION OF THE U. STATES.

We have before us the Annual Report of the Government upon the Commerce and Navigation of the United States. It is a most interesting document, and one which in some measure connected with railroad locomotion, we shall review it, for the benefit of our readers. In the first place, we may remark, that the increase of railroads does not merely denote the increase of land travel, and is wholly connected with the *land*. That would be an erroneous idea. For example, if a railroad runs from Cincinnati to Wheeling, it does not merely take the *land* intercourse. It takes also the passengers, who would have gone by steamboat. It thus interferes directly with the navigation by river. So, also, with the Hudson River Railroad, it takes hundreds of thousands of passengers who would have gone by boat. So, also, on the other hand, the railroad by the Isthmus of Panama, takes from the Ocean Navigation round Cape Horn, while it undoubtedly increases the steam navigation on the Pacific side, by increasing the facility with which passengers may reach the Pacific. If a Pacific Railroad across the continent were made—as it soon will be—the effect of that road would be to diminish Ocean navigation on the Atlantic side, and on the Southern Pacific; but, in all probability, would increase the aggregate on the Pacific, by increasing the commerce, between America and Asia. Thus, we see, that Railroads, though made on land only, have much to do with the water commerce of the world, and we must look at them together, in order to understand their bearings. While the miles of railroad in the Union are still rapidly increasing, shipbuilding and foreign commerce are declining. The latter is not, however, a direct consequence of the former; but rather of that great overtrading which has taken place since the change of the tariff in 1846. To all that, there must be a reaction, and it has come. There is, however, one way in which railroads do diminish ocean navigation. That is, by making the country more self-dependent. By uniting all parts of the country, and enabling each region to supply another with whatever it has of surplus, the demand for foreign wares is diminished; there is less need of foreign, by making the home supply more available.

Let us now look at the real condition of American commerce, as exhibited by the Government Reports.

1. OF TONNAGE.—The tonnage of the U. States, at intervals of three years, for the last thirty years, has been as follows, viz:

In 1822.....	1,741,391 tons.
In 1831.....	1,267,846 "
In 1834.....	1,758,907 "
In 1837.....	1,896,695 "
In 1840.....	2,180,764 "
In 1843.....	2,150,612 "
In 1846.....	2,362,064 "

In 1849.....	3,334,015 "
In 1852.....	4,130,440 "
In 1855.....	5,212,001 "
In 1858.....	5,049,808 "

We thus see that from 1846 to 1855, the tonnage of the United States increased at a most extraordinary rate,—having doubled in nine years! This, however, was evidently the result of a sudden and artificial stimulus. The *specific* duties were, in many instances, *treble* as high as the *ad valorem* duties under the tariff of 1846. This great reduction opened our Foreign Commerce and ship-building to a most extraordinary extent. When this would have naturally subsided, then came the gold mines of California, which enabled us to *pay* for increased importations, and thus the commercial excitement was kept up. There is now a decline in this stimulus, which, however, is more clearly exhibited in ship-building, to which we shall now refer.

2. OF SHIP-BUILDING.—Taking intervals of three years, we have this result:

In 1828.....	93,375 tons.
In 1831.....	85,902 "
In 1834.....	118,030 "
In 1837.....	122,087 "
In 1840.....	118,309 "
In 1843.....	43,617 "
In 1846.....	198,913 "
In 1849.....	250,577 "
In 1852.....	351,493 "
In 1855.....	503,410 "
In 1858.....	242,286 "

Here, we see, from 1846 to 1855, a still more extraordinary increase; no less than *treble* the amount of ship-building in 1855, which there was in 1846! The same cause produced it; but, from 1855 to the present year, there has been a yet greater decline. The ship-building of 1858 was only 42 per cent. of that in 1855! It must be several years before ship-building or foreign commerce can revive so much, as to equal that of 1855; but, in the mean time, there is one branch of water commerce and foreign trade, which *is* increasing. The commerce and ship-building of the Lake Basin is increasing, and as the shores of the great Lakes are populated and towns arise, the ship commerce of the Lakes will be greatly increased, and in this the railroads will aid it. All the great ports of the Lakes in the British, as well as American States, will be connected with railroads penetrating the interior, and products for exchange with various other cities.

3. THE SHIP-BUILDING OF THE STATES.—More than half the vessels of the United States are built in three States, viz., Maine, Massachusetts, and New York. The order of ship-building in the States is as follows:

Maine.....	55,959 tons.
New York.....	37,185 "
Massachusetts.....	32,99 "
Pennsylvania.....	21,513 "
Ohio.....	19,521 "
Maryland.....	6,995 "

The ship-building of Ohio, an entirely interior State, exceeds that of the entire Atlantic coast—including eight States! The truth is there is but one good harbor (Pensacola) in the Southern States, and an equally

small proportion of mechanics, and material to build with.

4. STEAM NAVIGATION.—The steam commerce has about held its own. There is no important decline, as may be seen in the following figures upon steamboat building :

In 1849.....	208 boats built.
In 1852.....	259 " "
In 1855.....	253 " "
In 1858.....	266 " "

The decline in building since 1855, has only been ten per cent. This proves the gradual prevalence of steam over sail navigation, and it is probable, that in time the tonnage of steamboats will equal those of sail-vessels.

5. DISTRIBUTION OF NAVIGATION.—The distribution of navigation in regard to commerce is important. The rivers are navigated chiefly by steamboats. The coasting trade is chiefly carried on by Schooners and Sloops, comparatively small vessels, exchanging the products of the United States, from town to town. Last year, their respective tonnage was :

Steam Navigation.....	729,599 tons.
Coasting Trade.....	2,361,595 "
Whale Fishery.....	194,593 "
Cod Fishery.....	110,895 "
Mackel Fishery.....	29,593 "
Foreign Commerce.....	2,900,400 "

This distribution proves that, exclusive of railroads, our Internal Commerce is far superior to the foreign. Indeed, this must become more and more so from year to year, as the interior of the country develops. No country on earth was ever so well adapted to self-support in all things; and whether we choose it or not, our foreign commerce must relatively decline. We will manufacture our own goods, and we really need nothing but coffee, sugar, and tea, from foreign countries.

As time advances, we shall develop the resources of the country, till like China, we shall buy very little.

ROUTE FROM CINCINNATI TO BALTIMORE VIA PARKERSBURG.

We have had occasion repeatedly, in our notices of the *Marietta Railroad* to state our conviction, that in communicating with the East, the Baltimore route, *via*. Parkersburg, was the nearest, and would ultimately be the most important. We do not mean that it will be the most important in regard to New York merely; but, in regard to the tide-water and general commerce. Already that fact is seen and felt by many sagacious minds.

The recent reports of the Central Ohio, Baltimore and Ohio, and North-Western railroads develop some facts, which prove, conclusively, what must be soon the current of trade. The city of Baltimore receives one million of barrels of flour from the West, by rail. Of this immense quantity, seven hundred thousand barrels came from Wheeling,

Bellair, Parkersburg on the Ohio, and five hundred thousand barrels were carried over Ohio railroads! Immense quantities of hogs and cattle were also carried on that route. Nothing can prevent the increase of this trade to an extent, as yet unimagined. But it may be greatly retarded by delaying to finish the Marietta Railroad. Great injustice has been done both to that road and its managers, by judging it from the results of an imperfect and crippled condition. It is not too much to say, that if the Cincinnati and Marietta Road were perfectly finished to Parkersburg, and the Ohio River bridged, that the freight business on that Road, would be quadrupled. Even now, when more than half the freight goes to Parkersburg, by steamboats, the Marietta Road is advancing in its freight business. The Bondholders of the Marietta Road would show a great deal more sense in completing it, than by foreclosing their mortgages. The latter process will not make their money any safer, nor pay their interest. The road must be finished, before it will pay, and then it will pay every body. This is the true course. We have just read a notice of this subject by SWAN, Mayor of Baltimore, from which we make the following extract :

	MILES.
Cincinnati to Philadelphia via. Benwood and Baltimore is.....	724
Cincinnati to Philadelphia via. Parkersburg and Baltimore is.....	685
Cincinnati to Philadelphia via. Pittsburg and Baltimore is.....	690

The route from Cincinnati to Philadelphia is via. Columbus, and to Pittsburg is by Columbus to Newark, thence to Steubenville by the Steubenville and Indiana Railroad, thence to Pittsburg by the road along the Ohio river, and thence to Philadelphia by the Pennsylvania Railroad. It will be seen that the Parkersburg route is not only forty-nine miles shorter than the Benwood route (*via*. Baltimore,) but is five miles shorter than Pittsburg route, while the Benwood and Baltimore route is forty-four miles longer than the last.

The route to Philadelphia, therefore, *via*. Benwood and Baltimore, could not compete with the route to Philadelphia by the way of Pittsburg, for the Philadelphia travel and trade.

But the route *via*. Parkersburg may compete with the route *via*. Pittsburg, certainly, if the short road of nine miles now contemplated from Scott's landing to opposite Parkersburg, were completed, and the through arrangements between the North-western Virginia and Marietta Roads, placed upon a satisfactory footing.

What has been the result of our effort to meet this competition?

The difference of time between Philadelphia and Cincinnati, *westward*, under the late arrangement with the Northern companies, is 3 hours, and eastward $5\frac{1}{2}$ to 6 hours, against the Baltimore and Benwood route, is nearly six hours compared with the Pittsburg route going eastward, and 8 hours westward.

The Pennsylvania Railroad carried during the year ending, December 31, 1857, passengers through.....	98,626
Baltimore and Ohio Railroad, September 20, 1857.....	38,256
Difference in favor of the former.....	60,410

Those who have taken the pains to examine into the past operations of these roads will see at a glance, how useless it is to attempt to maintain a successful competition, with our main dependence upon a Northern arm. It is seen, by the official reports, that there has been no increase of revenue on the Main Stem of the Baltimore and Ohio Railroad, since 1854. In 1858, the tonnage from Wheeling, Benwood, and Moundville, was less by nearly 8,000 tons than the preceding year, and about as much less than an average of the last four years, and some 2,000 tons less than the average of the years 1855 and 1856.

Those who projected the North-Western Virginia Railroad, foresaw the development which have since taken place, and the importance of being prepared to meet them, by timely preparation, at any reasonable cost. The appropriation of the trade of the Marietta line, with its numerous tributaries must, at no distant day, greatly augment the tonnage of the Baltimore and Ohio Railroad. The value of the connection by the proposed short line from Scott's landing to Parkersburg, and the establishment of a permanent system of thorough transportation, giving credit for diminished distance between Cincinnati and Baltimore, it would be difficult to estimate, in the midst of rivalries now going forward. If it be contended, that in the present unfinished state of the Marietta road, our reliance must rest upon tonnage exclusively, we may point to the fact that the Baltimore and Ohio Railroad has heretofore derived its revenue principally from tonnage, and has depended in the main upon the river for its supply. Our safety, as a commercial city, consists in removing, as far as possible, from Northern influence—to establish combinations upon which we can rely, and to intercept, before it becomes permanently fixed, a trade, which, although more convenient to Baltimore than any other market, is fast seeking an outlet at other points in the absence of facilities to conduct it to our own city. The outlay required in completing the chasm of nine miles from Scott's landing to Parkersburg, is at best trifling. Upon whatever interest it may fall, it is destined sooner or later to throw a tonnage upon the Baltimore and Ohio Railroad, which can only be estimated by a glance at the statistics of Southern Ohio, and the great South and South-west beyond it.

The Cincinnati and Marietta road has been, since its opening, struggling under heavy pecuniary embarrassments; but it is believed that a decided step in that direction, would induce a liberal feeling on the part of the bondholders connected with it; and tend to some action towards placing it in proper working order.

It is no part of my purpose to disparage the past or future of the Central Ohio road—that road has rendered valuable service to this city, and will continue to do so within the sphere of its attraction; but I deem it my duty to submit, for whatever it may be worth, my deliberate caution against too much reliance upon the Northern line and its tributaries, in the protection of the trade of our city.

STEBUNSVILLE AND PITTSBURG ROAD.

The Pennsylvania Railroad Company will soon complete the Steubenville and Pittsburg connection. This will have the effect of cutting off twenty-five miles of distance—making an aggregate of 665 miles between Cincin-

nati and Philadelphia—and 69 miles shorter than the Baltimore and Benwood route. With these improved facilities, there will be no successful competition but through Parkersburg.

It may be satisfactory to know, that hereafter, should the success of the roads already built, and the development of the country west of the Ohio river, make it desirable, the Marietta route may be shortened some ten miles, by the construction of the Hocking Valley Road of twenty-nine miles between Parkersburg and a point six miles east of Athens, at an estimated cost of \$700,000, avoiding the high grades and trestles so much objected to on that route. It may be, also, shortened five miles by an independent line into Cincinnati.

EATON AND HAMILTON RAILROAD.

On the 31st, December ult., the books of the Company were closed for the purpose of balancing the several accounts, in order to make up the regular annual report of the condition of the Company, and the business transacted for the past year.

It will be noticed that the revenues of the Road are in advance of the previous year about Ten Thousand dollars, this increase is derived exclusively from the tonnage of the Road; yielding a revenue in excess of 1857 of some sixteen thousand dollars, whilst the revenue from Passenger traffic falls some six thousand dollars below that of 1857, and in the number of passengers carried, some seven thousand.

The gross revenue for 1858, being.....\$151,866 22
The gross revenue for 1857, ".....140,935 88

Increase.....\$10,930 34

By reference to the current expenses, as given in the tables accompanying, it will be seen that the sum of one hundred and seven thousand two hundred and fifty-one dollars, have been expended and charged to this account. Ninety-five thousand three hundred and thirty-eight dollars and thirty-four cents of this sum, is for the ordinary expenses of manning and working the road, and rent of track at Hamilton—the repairs and renewals of the rolling stock (owned as well as rented) the repairs to the Road bed, the repairs and renewals of the rail; new cross-ties, repairs to bridges, etc., fully protecting, I am induced to believe, the property from depreciation. The residue, being a charge of eleven thousand nine hundred and twelve dollars, are extraordinary expenses for the rebuilding of two bridges that were burned in the fall of 1856, and for the rebuilding a stone culvert near the State line in Indiana, and the payment of delinquent taxes for the year 1857.

The net earnings for the year are forty-four thousand six hundred and fifteen dollars and twenty-one cents, this balance is carried to the credit of general account. To this account is credited sundry other sums as therein stated; as also the sum of eighty-four thousand and fifty-four dollars and ninety-four cents, the proceeds of a sale of a part of

a part of the Company's lands in Hamilton county; making, in the aggregate, the sum of one hundred and forty-nine thousand one hundred and sixty-nine dollars and twenty-one cents.

The application of this sum is fully set out in the exhibit under that head. By this means the original floating debt of the Company has been reduced some seventy-four thousand five hundred dollars, and the funded debt some forty thousand dollars, and the Suspended Interest debt some twenty thousand dollars, still leaving a floating debt to be provided for of some thirty thousand dollars out side of the Suspended Interest debt.

For the payment of this balance of floating debt, and to complete the purchase of rolling stock sufficient to successfully operate the Road, it will require the entire application of the net revenues of the year 1859, unless some more feasible plan can be suggested.

EATON AND HAMILTON R. R. LEDGER BALANCE. DECEMBER 31, 1858.

	Debits.		
Construction.....	\$1,101,744 69	Capital Stock.....	\$469,762 68
Equipment.....	59,492 91	Bonds Issued.....	717,734 10
Real Estate.....	37,491 51	Domestic Bonds.....	11,118 84
Cincinnati and Chicago Railroad Co.....	37,300 00	Orders.....	42 61
Cin. Logansport and Chicago R. R. line.....	15,300 70	Bills Payable.....	14,218 29
Profit and Loss.....	63,758 77	Pay Rolls.....	4,765 48
Transportation Balance.....	11,676 79	Suspended Interest.....	138,455 62
Post Office Department.....	\$1,173 85	Individual Balances.....	2,750 04
Railroad Current Balance.....	1,487 33		
Treasurer E. & H. Railroad.....	161 92		
		Total.....	\$1,358,867 89
		Credits.	

MONTHLY EARNINGS AND EXPENSES.

Months.	Earnings.	Expenses.	Net Earnings.
January.....	16,360 83	5,826 98	10,533 85
February.....	13,013 39	7,024 72	6,038 67
March.....	15,937 51	7,584 79	8,382 72
April.....	12,984 76	11,195 92	1,788 83
May.....	9,077 53	7,533 15	1,550 33
June.....	9,441 78	7,801 00	1,640 78
July.....	10,214 61	8,918 10	1,296 51
August.....	16,632 18	8,732 48	1,699 70
September.....	12,194 42	9,017 19	3,102 30
October.....	11,408 29	11,096 06	312 23
November.....	15,341 05	10,298 84	5,042 21
December.....	15,315 19	12,231 88	3,073 31
	\$151,866 22	\$107,351 11	\$44,615 21

DIRECTORS.

J. M. Starr, Wm. A. Bickle, James Neal, J. H. M'Whinney, Geo. D. Hendricks, Wm. Whitside, David Barnett, Lurton Dunham, James E. Young, Joseph Torrence, Hugh McBirney, J. W. Erwin, J. B. Curtis.

President—D. Barnett; Secretary—J. B. Stephens; Treasurer—E. W. McGuire; Superintendent—D. M. Morrow; Master M.—O. M. P. Little.

The receipts of the Tennessee and Mississippi R. R. for Jan. were \$28,817 87.

ANOTHER EXPERIMENT. NEW YORK AND ERIE RAILROAD.

The New York and Erie Railroad was begun as an experiment, and although useful and successful and absolutely necessary as an outlet to the South and her counties, it is a great pity that it should still continue to be used and abused as a "Grand Experiment." It is really high time that some settled, sensible policy should be adopted, that would put an end to the whims, caprices, twaddle, and todysm of its managers. The amount of capital invested, the interests of the country through which it runs, and of the Great West, all forbid this shuttle-cock business that has ever attended this truly great public work. The following is the last, though perhaps not the least, that has been gotten up for the purpose of bandying the interests of the fortunate and unfortunate stockholders of the Erie Road, for the benefit of gambling brokers:

[From the Elmira Advertiser.]

"By a recent edict of the President of the New York and Erie Railroad, the Conductors are required to ascertain the names of all the passengers, and make a register of them in a book provided for that purpose. The absurdity of the requirement was aptly illustrated the other day on the Elmira and Watkins branch of the road. The Conductor, coming up to a passenger, demanded his name. "Jackson," was the reply. To the next he put the same interrogatory, and was promptly answered, "Chas. Moran." The third gave his name as "Heady," but the fourth, not being quite so accommodating, or supposing there was some unnecessary use of his name, replied, "None of your d—d business!" The Conductor put the answers all down, and the last one was as near correct as the three preceding, though there was a kind of saucy bitterness in the tone in which it was uttered. In this way it goes—scarcely a passenger giving his right name to the Conductor. The names thus collected, however, are sent on to head-quarters with regularity and dispatch; and President Moran, it is said, has begun to think that he and his brother officers have a great many namesakes traveling over the road lately, as scarcely a list is presented him but he finds his name upon it, as well as those of all the other officers of the Company."

DEVELOPMENT OF NORTH CAROLINA.

We have published so many articles of interest from the pen of Prof. Christy, upon the subject of Grape Culture, &c., in the South West Alleghanies, that we take great pleasure in copying an article in relation to the mineral developments of that region. The following letter we copy from the *Ashville News*, of January 20, 1859:

Letter from Prof. Christy.

CINCINNATI, Dec. 3, 1858.

D. F. RAMSOUR, Esq.,

My Dear Sir:—Yours of October 21st, addressed to the President of the Nantahala and Tuckasee Land and Mineral Co., has been handed to me by D. F. Goodhue, Esq., with the request that I should reply at length to your inquiries.

Mr. Goodhue has been unable, during nearly the whole of last year, to attend to business. Early last winter he was attacked with inflammation of the eyes, and has only begun to recover within the last month or two, so as to read or write with safety. During the last week he has visited the mining region of Southern Illinois,

and to day he leaves for Pittsburg, to finish his examinations of machinery for mining. He assures me that in the article of steam pumps, for raising water from mines, the last six months have brought out improvements which will effect a saving of nearly one-third in the expense of freeing our mines from the inflow of water. In other machinery improvements are also appearing from year to year, indicating that much of the ponderous and expensive machinery hitherto employed by miners, may be in a great degree dispensed with.

You will remember that, when I first visited your place, there existed a confident expectation that the Rabun Gap Railroad would be finished in two years; and, as our Company were paying out large sums of money for mining property, I assured you that we would commence operations so as to be prepared to ship ores to market as soon as the road should be finished within shipping distance of our mines. But the report of the Chief Engineer, Col. Gwynne, which appeared last year, placed the completion of the road at two and a half to three years from its date. Mr. W. Patton, from whom we purchased one of the mines, and who is deeply interested with us, visited the Stump House Tunnel, in October, to see its stage of progress. He has just written us that it is the opinion of those engaged upon that work, that it will be completed in two years.

This then will be our guide. We can not allow our capital to lie unproductive, and shall watch with care the progress of the Tunnel; because when it is completed the road to our mines will be easily finished. They are close upon the road, and our facilities of transportation will be superior to those of any other mines in the State.

I think you will agree with me that the throwing of Copper Stocks into the markets, on mere temporary experiments at the mines, is very bad policy; because, to begin work, and then have to stop for want of means of transportation, and without any possibility of making dividends, would greatly prejudice the enterprise. Hence our company have thrown none of their stocks into market, and thus it is they do not appear in any of the lists of Stock operations.

Our Plumbago mine would have been opened last summer, but because the legislature of your State, in granting us a charter, limited us to Cherokee, Macon, and Jackson counties. The Plumbago mine is in Yancy county.

And, here, I may as well say, that the Company intend to organize the Nantahala Company, under the General Incorporation Law of your State, if they can obtain a slight alteration in one point. It requires the deposit of a large sum of money with the County Clerk, which may lie idle for months, while the application is passing through the legal forms. This provision is to prevent *bogus* Companies from springing up, and is all right. But if a Company have real estate titles to an amount, the equivalent of what that law requires, then let the Clerk and Governor have a discretionary power to issue the necessary patent without any cash deposit. Will you, therefore, write your member upon this subject, and urge the alteration proposed. We will have the new Nantahala Stocks issued at once if this is done.

Our President and myself expect to come out early in the Spring, to settle up and examine all our titles, a measure indispensable before beginning to operate at our mines. We will also determine the Railroad question, and the time of beginning work. I am in negotiation with an English gentleman, a premium wool grower and horticulturalist, who meditates settling upon our lands, to develop their capabilities. But more of this if I am successful.

I send you a package of reports to distribute among those interested with us.

Respectfully, yours,

DAVID CHRISTY.

THE GRAND TRUNK RAILROAD--A NEW ROUTE TO LIVERPOOL.

The prospect, we may say the *certainty*, of a direct railway connection between Cincinnati and Detroit, within a few months, via, the Cincinnati, Hamilton, and Dayton, and Dayton and Michigan Railroads, renders the following announcement which we copy from the Detroit Tribune, of great interest to our citizens:

"By private advices received by a leading commercial house of this city, by the last steamer, we have the gratifying intelligence that arrangements have been perfected for running a line of steamers from Montreal and Quebec to Galway, to commence about June 1st, in connection with the Grand Trunk Railway. This will, it is stated, be the connection during the continuance of navigation on the St. Lawrence, and in winter the steamers will run to Portland. From Galway arrangements will be made by which passengers and freight will be forwarded both to Dublin and Liverpool without delay.

The importance of this arrangement to our city it is difficult to over-estimate. The grading of the Grand Trunk between here and Port Huron, is now half completed, and the track will, if the weather is favorable, be all ready for the iron in about ten weeks. The completion of this great work is therefore an event which must take place in a few months, when our city will be the terminus of the greatest and best appointed railway system in the world, affording us a cheap and rapid means of transit for our surplus productions to foreign ports both summer and winter. In place of the numerous transshipments, and consequent vexatious delays, and onerous charges and commissions to which our merchants are now subjected, there will be only one transshipment, while the time occupied between Detroit and Liverpool, will be less than the average time consumed in conveying canal goods from New York to Detroit! We learn that the agents of the steamers will be ready to guarantee the delivery of freight at either terminus of the route in *fifteen days* from its shipment. When we remember that last summer the steamers running between Montreal and Liverpool, made invariably better time than the Cunarders, there seems no grounds to suppose that more is promised than can be performed.

MILES OF RAILROADS IN THE U. S.

The strides of the iron horse over our territory are somewhat wonderful. In 1828 the only railway in the United States was one of three miles in length, from the granite quarries at Quincy, Mass., to the tide water of the bay.—Now we are operating 28,238 miles of railway—about one mile to every thousand of our population. The Quincy railway dates back to the beginning of this century, and the cars were, as a matter of course, drawn by horse power.—Many years after its construction, the Mauch Chunk and Summit Hill Railroad, in Pennsylvania, was built, and among others of this first description of railway, were the South Carolina, the Baltimore and Ohio, the Hudson and Mohawk, the Ponchartrain, &c.; and onward to 1850 the rate of construction gradually increased. From that period to the present the building of railways has progressed at a more rapid rate, and at least three-fourths of the total mileage now in operation have been opened to travel and commerce within the past seven or eight years. Thus, in a comparatively short period, the network has expanded, isolated and local roads have been connected, and the whole brought into something like a system, and by the indomitable energy of our people, a condi-

tion has been consummated such as the world has never before seen.

Ohio stands in advance of all the other States in regard to the extent of railway open—2,958 miles. Next comes Illinois, with her 2,774 miles. New York stands third on the list, with her 2,718 miles, and Pennsylvania fourth, with her 2,656 miles. Of the New England States Massachusetts takes the lead, with 1,327 miles, while Virginia occupies the like position among the Southern States, with her 1,642 miles.

The future of railways in the United States, is one of grand proportions. As yet the course of events indicates as necessary to commerce and travel, is only partially completed. The Alleghenies have been scaled, and the Mississippi and Missouri brought into connection with the Atlantic and the great Northern Lakes and Upper Mississippi (a short interruption excepted,) have their waters connected with the Gulf of Mexico via New Orleans and Mobile. But west of the settled States the whole territory is yet a pathless waste. Beyond lie our Pacific territories. These portions of the Union must be connected, not only at one point, but at several, and lateral lines will be required for the convenience of the settlements that will be made within the zones that intervene.

The following table gives the actual mileage in each State, Jan. 1, 1859:

States, &c.	Miles.
Maine.....	496.2
New Hampshire.....	654.6
Vermont.....	557.9
Massachusetts.....	1,327.8
Rhode Island.....	167.1
Connecticut.....	601.8
New York.....	2,718.2
New Jersey.....	553.5
Pennsylvania.....	2,656.1
Delaware.....	114.7
Maryland.....	458.6
District of Columbia.....	3.5
Virginia.....	1,642.7
North Carolina.....	813.1
South Carolina.....	872.8
Georgia.....	1,174.8
Florida.....	192.3
Alabama.....	581.8
Mississippi.....	664.1
Louisiana.....	281.0
Texas.....	215.5
Arkansas.....	38.5
Missouri.....	547.2
Tennessee.....	855.8
Kentucky.....	493.3
Ohio.....	2,958.6
Michigan.....	777.0
Indiana.....	1,030.4
Illinois.....	2,774.4
Wisconsin.....	837.2
Iowa.....	313.8
Minnesota.....	.....
California.....	22.5

Total..... 28,238.2
[N. Y. Herald, Jan. 8.]

SOUTHERN PACIFIC RAILROAD.

The Louisville Journal of Saturday says:

We have advices from Marshall, Texas, by letter, to the 10th ult., which describe much excitement as existing there. The Arbitration Committee was examining the claims of the creditors, which had already been cut down fifty or sixty thousand dollars, and the impression was general that they would be reduced to below \$200,000 instead of \$327,000, which sum was first demanded. In addition to this intelligence we have a telegraph dispatch of the 29th ult., received via New Orleans yesterday, which states that the committee had one more day's business before them, when they would close their labors and make their award.

The ridiculous stories started by the New Orleans Delta, to the effect that Dr. Fowlkes was not provided with funds to pay those claims of creditors pronounced bona fide by the referees, have not the slightest foundation. He went to Marshall fully prepared to liquidate the entire \$327,000, if it had been decided that the legal claims amounted to that figure. The bold conspirators who attempted the desperate game of

getting possession of the road, through a fraudulent deed of trust, have exhausted all their ingenuity to throw obstacles in the way of amicable settlement. They have signally failed, however, and we are daily in hopes to have the pleasure of announcing to the stockholders that their regular representatives have regained possession of the property, and made all necessary arrangements to press the work on actively in the spring.

CENTRAL OHIO RAILROAD.

The *Wheeling Times* says:

We notice in the proceedings of the Railroad Convention, held in New York, that a high and well merited compliment was passed, by the chairman, on Mr. Jewett, the popular and efficient President of the Central Ohio Railroad, and his officers.

In speaking of the road the chairman remarked, that it had made more through connections, carried more freight and passengers, and done it in less time, and with fewer accidents from any cause, during the past year, than any railroad of the same length in the Union.

Another matter worthy of note in connection with the management of the Central road by Mr. Jewett, is, that the executive committee appointed to examine into the condition and working of the road, report that they find nothing to condemn, but every thing to approve.

Gen. Jas. Ball, the highly successful master of machinery on the road, also comes in for a share of praise in the same connection, which he richly deserves, as he is one of the most efficient and careful men that could be selected for this very responsible position.

CONTINENTAL RAILWAYS.

Public attention is much turned, at the present time, to the increase of railway communication in the Colonial and Indian possessions of Great Britain. Each country has necessarily peculiarities of climate or population which modify the construction and mode of working the railways in it. And since the extended railway communications of the Continent of Europe affords examples of this diversity of system, it may be useful to give a short summary of some of the most prominent points in which the continental railway systems differ from that in this country.

The railway systems of the Continent of Europe present, as a general rule, a marked contrast to the English or American railway system, in the greater degree of supervision or control which is exercised by the Governments.

The system of allowing private enterprise to initiate and carry on undertakings of this nature which has been pursued in England, and which has been more freely adopted in America, has furnished these countries with railways at a more rapid rate than they could have been obtained under a more restricted system. For instance, the length of line open to every million of inhabitants is in England 378 miles, in Scotland 432 miles, in Ireland 163 miles, and in the United States 647 miles; whilst it is only a 147 miles in Prussia, 125 miles in France, and 53 miles in Austria, per million of inhabitants. In Great Britain this rapid development has been effected at a great expenditure of capital. It would, however, be some compensation for the cost which has been incurred, if the colonies profit by our experience; and if they are thus enabled to avoid the errors which we have committed.

The following table shows the cost of the railways in the principal continental states.

in which railway communication has existed for some years, as compared with the cost in Great Britain and in the United States, as well as the profits of working in the respective countries:

Name of country.	Cost per mile.	Receipts per mile.	Proportion of expenditure to receipts.	Proportion which receipts bear to total capital.
Great Britain—				
England.....	£ 39,275	£ 3,105	45.	4.19
Scotland.....	98,152	2,140	44.	3.69
Ireland.....	15,614	106	32.	3.97
Total.....	34,130	2,712	47.	4.11
New South Wales.....	1897	31,845	1,102	1.02
India.....	657	10,240	42.25	4.09
France.....	1854	2,766	799	6.58
Belgium.....	1856	2,138	44.01	5.44
Austria.....	1847	1,814	56.16	4.48
Prussia.....	1857	16,300	67.19	6.33
Other German States.....	1857	21,287	53.10	6.25
United States of America.....	1855	14,465	53.58	6.25
.....	1857	14,101	51.39	6.22
.....	1855	14,466	43.92	7.44
.....	1857	14,465	54.00	4.18
.....	1855	14,465	63.39	5.52
.....	1857	14,417	64.	6.7
.....	1855	1,274		

It will be seen from this table that, although the receipts from English traffic are larger than on the Continental lines, and although the working expenses are smaller on English railways than on any other except the French, the net receipts only afford an average rate of 4 per cent. on the capital invested instead of a return of above 6 per cent., as is the case in France, Austria, Prussia and in the United States of America.

The great cost per mile of English railways has been partly due to the errors in legislation and to the cost of experiments made to perfect railway construction; partly to the anxiety of the early promoters of railways to adopt the easiest practicable curves and gradients; and partly also to the cost for land and compensations. On British railways this item has averaged from fifteen to twenty per cent. of the whole cost, whilst on foreign and American lines the proportion has been much smaller; for instance, the cost of land and compensation is about 7 per cent. of the cost of German Railways, which is barely equivalent to 3 per cent. upon the cost of British railways. The Continental nations have taken our dearly bought experience as a gift. Moreover they have avoided competition.

In France the Government have laid down the lines of railway and entrusted the construction to Companies. In some cases the Government have constructed the earthworks

and leased the working of the lines for limited periods; in other cases the Government have advanced money to be subsequently repaid; in other cases the Government have given a guarantee of interest.

In Prussia the companies have been allowed to select the lines, but they are executed under close supervision by the Government. The Government have also constructed lines of their own when the anticipated traffic has not offered sufficient inducement to private capitalists to embark in the undertaking.

In Austria the State has constructed several lines, but its recent policy has been to transfer them to private companies when they can be found to purchase them.

In Hanover and Bavaria the construction and working of railways has been undertaken by the Government.

About one half of the Belgian railways has been made and worked by the Government; these do not call for much remark, they were constructed at an early date, and the condition of the lines and of the rolling stock has apparently prevented a high speed being maintained. But the lines appear to be worked with great safety and regularity.

The condition of the Belgian Government railways is, however, to some extent, an instance of the slow progress in improvements which is the necessary result of a railway being in the hands of the Government. Many of our old English railways were constructed on the same model as the Belgian Government lines, but although the traffic in both countries has increased, our lines have been improved, whilst the Belgian Government lines have remained comparatively stationary, because of the difficulty of obtaining votes of money from the Legislative Chamber for the necessary alterations. A sum has, however, been recently given for effecting improvements.

The French and Belgian railways do not, however, differ so much in their construction and management from railways in this country as is the case with German railways. The railways over the whole of Austria, Prussia, and the German States have formed themselves into a union which follows a uniform system and presents peculiarities of management from which some useful hints may be gathered.

RAILWAY LEGISLATION IN AUSTRIA AND PRUSSIA.

The preliminary regulations for the organization of railway companies and for the construction of railways do not materially differ throughout Germany, and may be briefly described as follows:

When an association of private individuals desires to construct a railway, they lay a full description of the project, with an appropriate estimate of the capital required, before the minister charged with the supervision of the schemes, i. e. the minister of commerce or of public works, as the case may be.

If there is no *prima facie* objection, they receive power to make a detailed survey. The plans are then submitted to a commission, who examine it in detail, hear objections, and decide questions of interference with private property, and the mode of crossing roads, etc. If the landowners can not agree with the company as to the price of the land, the amount is fixed by one of the ordinary tribunals, the company being at liberty to proceed with their works as soon as they have paid money into Court.

The Government appoints commissioners to superintend the construction of the line, and plans of the line, showing every detail, together with the estimates, are submitted to these commissioners and must be approved by the department for railways before the works proceed.

Before a railway can be opened for traffic, the works and locomotive and working stock must be carefully examined and approved by the commissioners; the staff of men for working the line, and the proposed regulations must also be approved; and subsequent alteration in the works or working arrangements and regulations, or additions to the working stock, are also subject to the Government approval.

In Prussia there are commissioners named by the Government to watch over the railways in a particular district. It is the duty of these commissioners to travel constantly on the lines, to observe how the discipline is maintained on existing lines, and to consider the proposed works for new lines, and watch them during their progress. The accounts of the Companies are submitted to these commissioners for approval before any dividend can be paid, but their attention is mainly directed to requiring a sufficient sum to be placed to a reserve fund for securing the maintenance of the line and working stock.

In Austria the plans and estimates of the proposed works having been approved by the Government and executed by the Company, a commission of one engineer and one lawyer on the part of the Government, and a person on behalf of the railway company, is appointed to examine the works, working stock, regulations and staff; and upon the approval of the commissioners the line is opened.

The accounts of the company must be approved of by the Government before a dividend can be paid and when they are reported to be ready a commissioner is appointed to examine them.

In both countries, in cases of accident, an inquiry takes place before the ordinary legal tribunals. An inquiry is also instituted on behalf of the government railway department; and this department has the power of suspending from employment any officer or servant of the company.

A translation of the Prussian railway law, and of the Austrian railway law, and of the regulations made in consequence of it, are given in the appendix, No. 7. The Austrian law is worthy of perusal, as showing the very minute interference which necessarily follows Government intervention in railway management.

GENERAL FEATURES OF THE CONSTRUCTION OF GERMAN RAILWAYS.

The system upon which the railways have been constructed does not differ very materially in its general features from the system adopted in this country. The works on the Government lines recently constructed in Austria and Prussia are worthy of notice as being solidly and carefully executed.

An association has been created by the managers of German railways for promoting unity of management, and they have drawn up a set of regulations, or rather recommendations, upon details of railway construction, with a view to introduce uniformity. These recommendations are given in appendix No. 7; they deserve attention, as showing very clearly what may be considered the present standard of railway construction in Germany.

The construction of the permanent way appears to have occupied the attention of Government engineers. In 1852 a commission was appointed by the Prussian Government to institute inquiries into the form of rails. They made several experiments, and the conclusions at which they arrived appear to form the basis of the most approved description of permanent way now in operation in Prussia, and indeed in Germany.

The gage is 4 feet 8½ inches wide. The rails are broad based (that is, of the form known abroad as the Vignoles' rail, after Mr. Vignoles, who introduced it, but termed in this country contractor's rails); they weigh generally from 70 lbs. to 75 lbs. per yard, and the breadth of the base is not much less than the height of the rail; the joints are fished, the fishes in some cases being fixed by means of rivets, and the rails supported at the joints and in the center upon iron plates fixed to the sleepers. These iron plates are countersunk, so that the rail when it lies in them can not move laterally; and a plate is fitted over the flange of the rail to keep it in its place. In some places the plates are fixed down by spikes, but the best mode of fastening is by means of fang bolts passed through the sleepers secured by nuts. The sleepers are generally placed about three feet from center to center, and are nearly eight feet long.

Upon the best roads great attention has been paid to ballasting and drainage. On the Austrian State railway near Trieste, the ballast below the sleepers is twelve inches thick, and under the ballast a layer of large stones, also twelve inches deep, has been laid. This system of ballasting and drainage tends to prevent any injury to the line from the melting of the snow and from frost.

The most exposed portions of the line are protected from snow drifts by screens of earth or plantations on the sides of the lines.

It is the invariable practice on the German railways, at least with facing points, to attach a signal to the handle of the lever which moves the points and switches. The best form of signal adopted is one in use on the Austrian lines, which consists of a disc about one foot six inches in diameter upon an iron standard about five feet high; in the center of the disc a lamp is placed at night. When the points are set wrong the disc is turned towards an approaching train; at night the lamp is lighted; when the signal is turned off this light is seen through a glazed opening in the side of the signal; when the disc is turned towards a train in order that it may be seen, a reflector, placed in front of the lamp, conceals the direct view of the light, but reflects the light on to the disc. It is a rule that the levers of all points, when not held, should be either pinned or locked in position.

The average amount of rolling stock per mile on railway on German railways is as follows:

	Loco. Eng.	Pass. Car.	Other vehicles, Wagons, etc.
On lines belonging to the German Railway Union 1856, per mile.....	38	82	6.31
On Austrian State railways in 1851, per mile....	49	70	4.26
On Prussian Railways in 1837 per mile.....	43	68	7.60
On railways in Great Britain and Ireland in 1854, approximately per mile..	52	1.52	13.26

A large number of engines in use on German railways have been procured from England; there are, however, now several large manufactures in Germany, and the present supply is chiefly derived from them. The

regulations of the German Railway Association suggest that, as far as possible, the principle of supporting the engine on three points should be adhered to in the construction; and to carry this into effect some engines are in use in which the leading springs are connected by a balance beam passing under the smoke box.

The Semmering pass between Gloggnitz and Murzuschlag is nearly 24 miles in length. Some of the incline ascending from Gloggnitz are as steep as 1 in 40, and one of them, upon which occurs a curve of ten chains radius, extends for above a mile in length. These steep inclines and curves are worked with engines constructed in a manner to secure a large amount of adhesion when required; this is effected by an arrangement to throw the wheels of the tender into gear with the coupled wheels of the engine; the arrangement is, however, completed; and it is stated that the strain upon the machinery is so great that it is frequently out of order.

These engines, it is stated, can draw in fine weather 120 tons up the Semmering, exclusive of the weight of the engine, which is between fifty and sixty tons. When the tender wheels are coupled they will draw 150 tons.

The passenger carriage in use on German railways are constructed on various models. An old form of American carriage is in use on some lines, but does not give satisfaction, except as a convenient mode of conveying a large pleasure traffic. On the Austrian State railway between Vienna and Trieste, where carriages on the American pattern are in use, the newest arrangement is to dispense with the trucks which are used to support the carriages at each end, and to support the carriage on four axles, of which the two center axles are fixed; and the axles near the ends of the carriage are allowed a lateral play at the bearings, and are also adapted to move in the arc of a circle under the carriage so as to accommodate themselves to the road.

The form, however, most generally adopted for new carriages is a carriage about 30 feet long on six wheels, the axles being about 11 feet apart, and 4 feet from each end, a play of about one inch being allowed at the center axle.

On the Austrian Government railway between Vienna and Trieste some wheels with cylindrical tyres are in use; the tyres are 3½ inches broad from the flange to the inner edge, and the part near the edge for 1½ inches is bevelled or coned to 1 in 10. Cast iron wheels, guaranteed by the maker to last nine years, were also in use on this line, at a cost of £15 per ton.

The axle boxes for carriages and wagons, which appeared to give the greatest satisfaction, are constructed for oil, which is contained in a sponge so placed as to press against the lower part of the journal. Fresh oil being poured in through an aperture in the face of the axle box upon the level of the center of the axle, this opening is covered by a plate screwed on, and at the back the dust is prevented from entering by a collar of hemp fixing close to the axle and let into a groove in the axle box. The carriages are stated to run very considerable distances with these axle boxes without any renewal of the oil. There is, however, some difficulty in obtaining pure oil.

The accommodation afforded by the car-

riage is very good; * the first class are very comfortable; the second class are cushioned and fitted with nets, etc., and are equal to the first class carriages on most English railways, whilst the third class have plain wooden seats, but are generally designed with more regard to comfort than the second class carriages on English railways.

It may be mentioned that on some railways the carriages are warmed in winter by means of heated sand placed in iron boxes; which retains the heat longer than boiling water.

A very large proportion of the goods wagons are covered, and are on six wheels. Many of the covered wagons are supplied with small windows, and planks and trestles to form seats are fitted to them, so as to enable them to be used on emergencies either for the conveyance of troops or for excursion traffic.

MANAGEMENT.

The system of management of the German railways varies in several important particulars from that in this country. The general standard regulations are shown in Appendix No. 7.; they deserve careful perusal as evidencing the attention given to important details.

The apparent cause of the difference is partly the plenty or rather cheapness of labor as compared with that in England, and partly the national habit of elaborating details, combined with a military precision in obeying the regulations. The large employment of labor is a feature in the management which presents essential difference from the system of management in America, where labor is dear.

The following was stated to be somewhat about the rate of wages on some of the lines in Prussia, viz—

For the conductor and baggage guard £35 to £45, and nearly 1d. for every 10 English miles traveled.

Do. guard (Schaffner) £25 to £38, and nearly 3d. for every ten English miles traveled.

Do. engine driver £45 to £60 and nearly 1 1/2d. for every ten English miles traveled.

Do. fireman from £30 to £37, and nearly 3d. for every ten English miles traveled.

Do. signalman (Bahn-water) £20 to £27, and if employed to give out tickets at a small station, about 5s. per annum extra.

In England the earnings are seldom less than, for an engine driver £90; a fireman, £60; and a guard, £52 per annum.

In working the lines the most important difference between the German railways and railways in this country is the system of signalling trains.

The line is divided into sections of from a quarter of a mile to three quarters of a mile in length: at the end of each section a hut is erected, and a signal and signalman (Bahn-water) placed.

The signal stations are so situated as to allow each signalman to see the signal stations adjacent to him, as well as the intermediate line. When a train is ready to start from any station, an all-right signal is given by the signalman at the station, which is taken up and repeated by the first signal station and so on by the signal stations along the line to the next station.

If anything is amiss on any part of the line, the signal station nearest to the obstruction, instead of repeating the all-right signal, would give the danger signal, which would then be repeated by the signal stations until it meets the train. On some lines a telegraphic wire is laid between these signal stations. Auxiliary signals are not used with this system of signalling; the number of persons employed in signalling is very great. It is the duty of these men, in addition to signalling the trains, to examine the line near their stations generally at least three times a day, and before every train at night, to attend to trivial repairs, and to report the condition of the line when repairs are needed beyond what they can do themselves.

With this system the number of trains which can be allowed to travel with safety, on single lines in opposite directions, is larger than other systems admit of, and the inconvenience of unpunctuality in any of the trains is very much lessened. On the Austrian Ferdinand's Nordbahn I. was informed that for a short period, about two years ago, when there was a great pressure to convey troops, 82 trains had been worked over the single line daily; during last year 62 trains worked daily over the single line.

Whilst the security which this system affords renders it advantageous to adopt it where labor is cheap, it would be impossible to adopt in a country like this where labor is dear.

The servants, such as brakemen or guards, sent with trains, are more numerous than is the case in this country. One man is placed on the top of every third or fourth carriage of a train, to look back along the trains; in case he observes anything wrong in the train he is enabled to communicate with the engine driver by means of a cord which passes along the tops of the carriages, and communicates with the steam whistle on the engine.

The duty of the man who sits on the last carriage is to look out for any signals from the plate-layers.

There is also a conductor on the train, who has the charge of the train, and in Prussia he invariably carries a portable electric telegraph, by means of which, in case of accident, he can communicate by the line wires to the nearest station.

A man in charge of the baggage is also sent with every train; the baggage is all weighed, labelled, and entered in a way bill. The passenger receives a ticket with the number of the label on it, and a statement of the liability of the company; a foil of this ticket is sent to the control or audit department, and another given to the man in charge of the baggage. At any station where baggage is put into a train, the man in charge of the baggage gives a receipt for it, and takes a receipt from the station master when he gives it up.

The disadvantage of the system is, that if a passenger desires to stop at a station short of that to which he has taken his ticket, he has great difficulty in obtaining his luggage, and the delay in giving out the luggage would prevent him from going on by the train in which he came, if, on arriving at the station to which he had booked himself, he wished to do so.

The tickets are all issued by the station-master but collected by the guards of the train, and transmitted by the conductor to the central office. The turn of duty of the guards is often changed, and the superior officers occa-

sionally stop the trains and examine the tickets, but the conductor, unless carefully watched, possesses power under this system of defrauding the management.

An important department in the management of German railways is the control department. It is an audit department to check both the receipts from tickets, baggage, and goods, with the mileage, and the charges which should be made according to the tables of fares and rates; it also compares the returns as to the speed and running of trains, etc., with the time tables and regulations, and causes all discrepancies to be accounted for. All details of work done by engines, carriages, axles, etc., are collected and arranged in this department, and the whole information as to the work done and as to the general financial position of the Company is collated.

The German railway companies keep a very careful record of the results of the work done by the different parts of the rolling stock. The extra labor which this entails is, they consider, amply repaid by the saving which the thorough knowledge of its condition and at the cost at which each service is performed, which they thus acquire, enables them to effect.

The speed, exclusive of stoppages, generally allowed for passenger trains is from 25 to 40 miles per hour, and for goods trains from 16 to 25 miles per hour. The returns I have obtained of German railways do not admit of a comparison being made of the average frequency of trains in Germany and in Great Britain, but it will to some extent follow the density of population, which is nearly as one to two.

The fares charged on German railways per English mile, and in English money, are somewhat according to the following table:

	1st cl.	2nd cl.	3rd cl.	Sol'rs.
Prussia } Express.....	1-9	1-3		
} Other trains..	1-4	1-13	77.....	4
Austria.....	1-4	1-1	83.....	2
Great Britain.....	1-97	1-41	88.....	1

For goods traffic the rates are published, and, as a rule, special rates are not made.

Several railway companies, whose lines form links in a through line of communication have entered into agreements for regulating the through traffic, and in some of these cases the through traffic accounts are regulated or cleared at a central office.

The railway Companies between whom these agreements do not exist keep their own accounts of the traffic, and of the miles run by the carriages and wagons which pass between their own and foreign lines; these accounts are settled every month.

The mode in which the railway companies are governed does not materially differ from the system in this country. On some lines, however, the whole management is committed to three well paid Directors, who devote their whole time to it. They are assisted in important questions by a committee of from six to nine other Directors, without whose concurrence capital may not be expended. It is also the duty of these consultative Directors to keep up a continual audit of all the transactions of the Company.—*Heraopath's Journal*.

✂ The Jeffersonville and Indianapolis R. Co., has reduced the rates of transportation on all freight, 5 cts. per 100 lbs.

* On some Prussian Railways a carriage with a water-closet is attached to passenger trains, which passengers may make use of between stations, upon payment of a small fee.

THE RIVER SYSTEM OF BRITISH CENTRAL AMERICA.

Geographical Memoir upon the Navigable Streams of the Basin of Lake Winnipeg, and upon the Areas Adjacent to Minnesota.

[Read by James W. Taylor, from a Committee appointed by the St. Paul Chamber of Commerce, and directed to be published, Jan. 22, 1859.]

The Committee appointed by the Chamber of Commerce of the city of St. Paul upon the subject of Steamboat navigation on the Red River of the North, have considered that the occasion will justify them in presenting to the citizens of Minnesota and all interested in the progress of the Territory northwest of Minnesota, a summary of facts now fully ascertained in regard to the river system, with which the Mississippi and the St. Lawrence interlock. As incidental to such a design, especially in connection with the subject of steamboat navigation, some description of the areas which are watered by the rivers henceforth proposed to be included within the internal commerce of the continent, will also be attempted.

The committee are impressed with the belief, that no interest hitherto expressed in our community upon this subject is commensurate with its importance. We have spoken with reserve, while intelligent writers in England and in Eastern cities, have cast a brilliant horoscope for our city and State, in regard to these northwestern communications. Take an instance, partly to inspire confidence among ourselves, and also to justify any manifestations of enthusiasm in the progress of the present discussion. In December, 1858, a document appeared from the Chamber of Commerce of the city of New York, on canal navigation by steam, containing, with a report, an address by Hon. F. A. Conkling of the New York Legislature, in which occurs the following paragraph:

"With the valley of the Mississippi and St. Lawrence rivers we have been accustomed to regard the area of the northern and central portions of our continent available for agriculture as exhausted. We limited our vision to the ground we stood upon. But no sooner have we filled up one grand division than another opens before us. There is, in the heart of North America, a distinct subdivision, of which Lake Winnipeg may be regarded as the center. This subdivision, like the valley of the Mississippi, is distinguished for the fertility of its soil and for the extent and gentle slope of its great plains, watered by rivers of great extent, and admirably well adapted for steam navigation. It has a climate not exceeding in severity that of many portions of Canada and the Eastern States. It will, in all respects, compare favorably with some of the most densely peopled portions of the continent of Europe. In other words, it is admirably fitted to become the seat of a numerous, hardy and prosperous community. It has an area equal to eight or ten of our first class States. Its great river, the Saskatchewan, carries a navigable water line to the very base of the Rocky Mountains. It is not at all improbable that the valley of this river may yet offer the best route for a railroad to the Pacific. The navigable waters of this great subdivision interlock with those of the Mississippi. The Red River of the North, in connection with Lake Winnipeg, into which it falls, forms a navigable water line extending directly north and south nearly 800 miles. The Red River is one of the best adapted to the use of steam in the world, having from twelve to fifteen feet of water nearly its en-

tire course, some 450 miles. It waters one of the finest prairie regions on the continent. Between the highest point at which it is navigable and St. Paul, the head of navigation on the Mississippi, a railroad is in process of construction, sixty miles of which will be completed the coming year. The entire distance to be built is only 200 miles. When this road shall be completed, another grand division of the continent, comprising half a million square miles will, as before stated, be open to settlement, in which communities will spring up with the rapidity which has marked the marvelous growth of our own country, possessing all the elements of prosperity and of an extensive commerce. * * *

No continent can show a parallel, as none can show such stupendous works for the facilitation of commerce by a people 'in the gristle, and not yet ripened into the bone of manhood.'"

Sustained by testimony so impressive as to the future commercial importance of the basin of Lake Winnipeg, the committee proceeded to a particular description of the navigable rivers, which diversify the map of North America over the area in question.

THE RED RIVER OF THE NORTH.—We have the authority of Capt. John Pope, who ascended the Red River of the North from Pembina to Otter Tail Lake in 1849, that there is a depth of five feet at the mouth of Sioux Wood River, and of six feet twenty miles north, at the site of a military post proposed by Major S. Woods, of 6th Infantry, in 1849, and occupied in 1858 as Fort Abercrombie; thence to Shaysenne the river is six feet deep; from Shaysenne to Goose River nine feet, but with an intervening rapid one mile long, with a depth of five feet; from Goose River to Red Lake River, twelve feet; and from Red Lake River to Pembina and Lake Winnipeg, sixteen feet. At the head of steamboat navigation about 46 degrees 23 minutes of north latitude, the stream cuts deeply into the clay, which forms its channel, rendering the waters turbid. The current of the river is moderate, not more than two miles an hour, with numerous bends. The Shaysenne, a tributary from the west, has the same characteristics, and is probably navigable a hundred miles of its course; being narrow, deep and circuitous. The Assiniboin, another tributary within the British Territory, has a greater volume of water than the Shaysenne, and can doubtless be ascended by steamers for a distance of two hundred miles. The Red Lake River is a Minnesota stream, flowing from the lake so called, and falling into Red River, near latitude 48. Its volume of water is considerable, exceeding that of the Shaysenne, but its navigation is said to be obstructed by rapids.

Mr. Ellis Smith, an intelligent engineer, and a member of an overland party from St. Paul to Frazer river gold mines, has reported that the Red River is navigable above (south of) Pembina 400 miles, while the distance from the international line by the river, to Lake Winnipeg, is 175 miles—total distance navigable by steamers 575 miles. To this add 350 miles for the navigation of tributaries, and the river coast of the Red River valley, accessible with steamers, will be found to exceed nine hundred miles.

LAKE WINNIPEG.—This inland sea is about two hundred and fifty miles in length, but of unequal breadth. Its area must be equal to Lake Erie. The western bank is alluvial, resting upon limestone; while the numerous

bays of its eastern shore develop the gneiss granite and trap rocks of the primary formation. The lake is not deep, but with no shallow obstructive of navigation.

THE RIVER SASKATCHEWAN.—All subsequent explorations confirm the accuracy of Sir George Simpson's description of this important river, as given by him in his overland journey around the world. He applies the name to the north branch, terming the south branch of the Saskatchewan, the Bow River. Their point of junction is in about latitude 53, and longitude 105 degrees, or one third the distance from Lake Winnipeg to the Rocky Mountains. Just west of this point of junction, in the vicinity of Fort Carlton, Sir George Simpson saw and described the two rivers.

"The Saskatchewan," he remarks, "is here upward of a quarter of a mile wide, presenting, as its name implies, a swift current. It is navigable for boats from the Rocky Mountain House, in longitude 115 to Lake Winnipeg, upwards of seven hundred miles in a direct line, but by the actual course of the stream, nearly double that distance. Though above Edmonton the river is much obstructed by rapids, yet from that Fort to Lake Winnipeg, it is descended without a portage, alike by boats and canoes, while even on the upward voyage, the only break in the navigation is the Grand Rapids, at the mouth of the river.

"The Bow River, or south branch of the Saskatchewan, takes its rise in the Rocky Mountains, near the international frontier, and is of considerable size, without any impediment of any moment. At the crossing place (as far west as longitude 105,) the Bow River was about a third of a mile in width, with a strong current, and some twenty miles below falls into the main Saskatchewan, whence the two streams flow towards Lake Winnipeg, forming at their mouth the Grand Rapids, of about three miles in length.

In the narrative of Captain John Franklin's journey to the shores of the Polar Sea, in the years 1819–22, a fuller description of these Saskatchewan Rapids is given, than has been elsewhere published. We propose to compile some particulars of his course westwardly from the mouth of the river in Lake Winnipeg to Cumberland House, in latitude 54, longitude 102, where he left the river on his northern journey.

Capt. Franklin's party, on the 10th of October, 1819, began to ascend the Saskatchewan. From the mouth of the river to the foot of the Grand Rapid, the distance is two miles. There are several rapids in this short distance, during which the river varies its breadth from five hundred yards to half a mile. Its channel is stony. At the Grand Rapid, the Saskatchewan forms a sudden bend from south to east, and works its way through a narrow channel, deeply worn into the limestone strata. The stream washing with impetuous force over a rocky and uneven bottom, presents a sheet of foam, and seems to bear with impatience the straightened confinement of its lofty banks. * * * The portage is eighteen hundred yards long, and its western extremity was found to be in 53 deg., 18 min., and 25 sec., north latitude, and 99 deg., 28 min., 02 sec., west longitude.

By noon on the 12th of October, the boats and their cargoes, having been conveyed across the portage, the party resumed their voyage.

"The Saskatchewan becomes wider above

the Grand Rapid, and the scenery improves. The banks are high, composed of white clay and limestone, and their summits are richly clothed with a variety of firs, poplars, birches and willows." Captain Franklin proceeded, as he stated, to Cumberland House with no further difficulty of navigation, but it was not until the 22d of November that the Saskatchewan was completely closed by ice. On the 1st of December he mentions that "there had been a determined thaw" during the preceding three days. The ice on the Saskatchewan river and a lake expanded from its channel, broke up, and the traveling across either became dangerous. This mild weather continued until the 20th of December. The latter circumstances, though not relating to the immediate topic of navigation, illustrate the great similarity of climate to what we experience (especially in 1858-59) in Minnesota.

These statements from the journal of Capt. Franklin, are sufficient to establish that, in volume and depth, the Saskatchewan is fully equal to the Mississippi above Cairo. Nor are the rapids at the mouth an insuperable obstacle to the conveyance of a steamer from Lake Winnipeg into the navigable waters above them. Gentlemen connected with the Hudson Bay Company represent, that the channel at the most agitated point, is deep, boats under skillful pilotage descending the rapids with safety, while, of course, a vessel could be cordelled through in the opposite direction. It would not be expedient to attempt this, except to introduce steamers, as the navigation of the Saskatchewan demands them, but it is feasible and probable that steamboats now moored in the Mississippi and Minnesota rivers, will yet seek the northwestern limit of their voyages within view of the Rocky Mountains.

When, however, an efficient public organization is extended over the Saskatchewan Valley, there is reason to believe, that one of its first measures will be to shorten the route from the Red River of the North to the channel of the South Saskatchewan, by an improvement most obviously suggested by Nature. The Assiniboin falls into the Red River, near Fort Garry; its course is quite directly from the west; such is also the direction of its principal tributary, the Qu' Appelle or Calling River. Mr. James McKay, an intelligent officer of the Hudson Bay Company, assured a member of the Committee last summer, that the sources of the stream last named, the Qu' Appelle, were within a short distance from the South Saskatchewan—from the "elbow," as it is called, whence that river turning from a course west to east, bends northeastwardly to its junction with the North Saskatchewan—a direction, which the united stream mostly retains to its mouth. Mr. McKay states, that with little expense, the Culling and South Saskatchewan channels might be connected, thereby improving the navigation of the Assiniboin, and enabling the river boats soon to be multiplied on the Red River of the North, to avoid the exposures and perils of Lake Winnipeg, and the inconvenience of transhipment at the rapids. The feasibility of such a connection has recently been confirmed, by explorations on the spot, made under the direction of the Canadian Government; and when accomplished, a great facility for direct communication to the most favorable pass of the Rocky Mountains—that in latitude 50, known as the Kootonais Pass—will have been secured.

The topic last under consideration, will suggest to the student of a map of Central British America, (so suffer us to style the immense and fertile plains, whose western limit is the eastern boundary of British Columbia,) that a similar, only a much greater, extension of river communication, may hereafter be accomplished between the head of steamboat navigation on the North Saskatchewan at Fort Edmonton, (latitude 54 and longitude 113½) and the Athabasca and Peace Rivers, navigable tributaries of the Mackenzie River. In similar latitudes Russia has thus linked by short canals, the channels of great inland streams; and when it is considered that the sources of Frazer River are separated from those of Peace River by the distance of only 317 yards—the former an affluent of the Pacific, and the latter flowing from the west side of the Rocky Mountains, northeastwardly into the mighty river of the Arctic Ocean—the late prediction of Lord Bury, that a canal will yet wind through the gorges of the Rocky Mountains, in a high northern latitude, may be fulfilled within his own allotment of life.

(Concluded next week.)

MONETARY AND COMMERCIAL.

Since our last issue there has been a somewhat increasing demand for money, the remittances from the country having been materially reduced, the supply of currency is not equal to the demand. The Cincinnati *Price Current* says:

"A large amount of grocery paper has been discounted during the week. This class of customers have heretofore, this season, borrowed sparingly, but the activity in this branch of business, and the high prices current for the leading articles, demand a more free use of capital. The requirements of the provision trade are also large, the stocks held on Western account being heavier than usual. The value of hog products in this market at the present time is over five million dollars. Then there is three-quarters of a million invested in surplus flour, which is stored away for an advance and in addition we have an improved demand for capital, consequent upon the revival of business among the manufacturing classes, not to speak of the increased wants in almost every other branch of trade, as compared with the movements experienced three months ago. In a word, business generally, is reviving; stocks of produce are large; prices are high, and the demand for money is, for the first time within a year, about fully up to the supply of active capital, and while the market is as easy as, under the circumstances, it would be safe to have it, the tendency both as regards rates and the choice of names, is in favor of lenders. Notwithstanding the severe lessons of the last two years, there is an unmistakable tendency toward inflation, and a contraction of the monetary strings will do no harm."

Eastern Exchange is still quite scarce and rates have an apparent upward tendency.

The New York *Courier and Enquirer*, of Monday, says:

"The features of the Stock Board are more favorable to-day to holders. A recovery of values took place in part in nearly all the Shares and Bonds quoted. While the Sub-Treasury is becoming temporarily filled at the cost of the Banks, the latter feel less inclined to continue their Call Loans. Hence the stir made among borrowers, and a transfer of Loans in many cases at a higher rate. Business Paper of the first order will not pass under six per cent.

"The sales of New York Central for the opening are at 12½ to 82½. Compared with yesterday's closing sales we note an advance in Missouri Shares ½, New York Central Shares ¾, Erie ½, Cleveland and Toledo ¼, Panama 1¼, Chicago ¾, Galena and Chicago ¾."

At the annual meeting of the Stockholders of the Northern Central Railroad, held at Baltimore on Wed-

nesday, the following statement, showing the revenue of the year, was presented:

From passengers.....	\$29,912 08
From freight.....	5,404 84
From mail.....	12,687 50
From sundries.....	4 07 46
Total.....	\$513 3 33 4
Working expenses.....	432,219 94
Net revenue.....	\$392,551 44

After paying interest, sinking fund, old claims, etc., there is a net surplus profit of \$89,213 88. The Company expended during the year 1858, for various improvements, \$719,539. The means derived from loans and other sources during the same period amounted to \$630,425. Mr. Gittings is spoken of as President, in place of Mr. Barnum, resigned.

The annual report of the Macon and Western Road has been published. The traffic of the year results as follows:

Gross receipts.....	\$376,463 29
Expenses.....	162,468 24
Net earnings.....	\$213,995 05
Surplus last report.....	161,318 98
Received on new stock.....	240 00
Total.....	\$266,156 03

From this the following disbursements have been made, viz:

Dividends.....	\$115 104 60
Interest.....	6 370 60
Construction.....	1,965 98
	123,438 99

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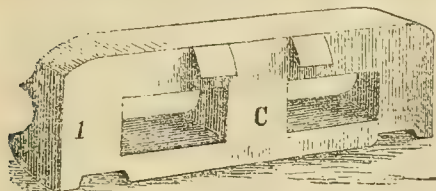


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outside side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

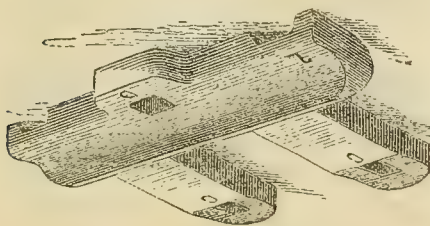
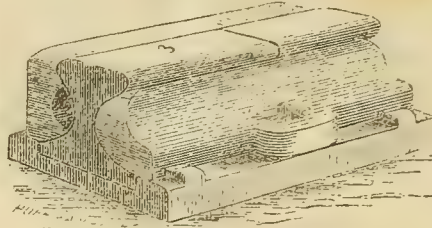


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in

part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through the rails and correspond to vertical slots in the chair. The rails and chair are secured to the joint by spikes passing through the chair and down the sides of the base of the rails, in the usual manner, and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and fastened together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other.

One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfect safe road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

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FOR ALL THE EASTERN CITIES.

This is the only route to Washington City.

Passengers by this route can visit Baltimore, Philadelphia, New York and Boston, at the cost of a ticket to Boston alone, by other lines.

Time as quick and fare as low as via any other Route.

Inquire for tickets via the Baltimore and Ohio Railroad, at any of the principal Railroad Offices in the West.

E. F. FULLER, Gen'l Western Agent.

L. M. COLE, General Ticket Agent.

W. P. SMITH, Master Transportation.

ENGINEERING!!

The undersigned is prepared to furnish **SPECIFICATIONS, ESTIMATES, AND PLANS,**

In general or detail of all kinds of **Steam Vessels, Engines, Boilers, Mill Work, &c** Particular attention given to the superintending of

LOCOMOTIVES, TENDERS, CARS,
And Railway Machinery of every Description,

While under construction.
AGENT FOR THE PURCHASE of, on commission all articles required for Railroads, Steam Vessels, Locomotives, Engines, Boilers, Machinery, &c.

General Agent for **ASHCROFT'S STRAM GAUGE, ALLEN AND NOYES METALLIC SELF ADJUSTING CONICAL PACKING, DUDGEON'S HYDRAULIC JACK,**

Also, for Water Gauges, Indicators, Steam Whistler

CHAS. W. COPELAND,
 Consulting Engineer,
 64 Broadway, N. Y.

BALTIMORE AND OHIO RAILROAD. GREAT NATIONAL ROUTE

—TO—
WASHINGTON CITY,
BALTIMORE,
PHILADELPHIA,
NEW YORK,
AND BOSTON.

THE BALTIMORE AND OHIO RAILROAD, with its improved Western connections, presents a direct and desirable route to BALTIMORE, PHILADELPHIA, NEW YORK and BOSTON, and the ONLY ROUTE that can furnish a THROUGH TICKET AND BAGGAGE CHECK TO

WASHINGTON CITY.

TWO TRAINS LEAVE CINCINNATI DAILY,
(Sundays Excepted.)

9 A. M. and 11:30 P. M. via **LITTLE MIAMI RAILROAD**; connecting at Columbus with the **CENTRAL OHIO RAILROAD**.

Through from Cincinnati to Wheeling **WITHOUT CHANGE OF CARS**.

Connections at MORROW with the **CINCINNATI, WILMINGTON AND ZANESVILLE RAILROAD**, are made by the 9 and 11:30 P. M. trains.

The above Trains arrive in Baltimore at 7:25 A. M., 5:05 P. M., in Washington 10:40 A. M., 7:05 P. M.

Inquire for Tickets via **BALTIMORE & OHIO RAILROAD**.

FOUR trains leave Baltimore daily for **WASHINGTON CITY**, at 4:30 A. M., 8:50 A. M., 3:30 P. M., and 5:30 P. M. Connecting trains leave Baltimore daily for **PHILADELPHIA, NEW YORK and BOSTON**.

FOR THROUGH TICKETS,

And all information, please apply at the offices, Nos. 2 and 3 Burnet House; at the old office, southeast corner of Broadway and Front streets, and at the Little Miami Depot.

W. PRESCOTT SMITH, Master of Transportation Baltimore and Ohio Railroad.

L. M. COLE,
General Ticket Agent.
E. F. FULLER,
General Western Agent

MOSELEY'S TUBULAR WROUGHT IRON



ARCH BRIDGES AND ROOFS.

THESE BRIDGES AND ROOFS HAVE now been fully tested in this vicinity, and it is universally conceded that they can not be excelled. The Roofs are wholly of Wrought Iron, or mixture of Wood and Iron; Sheeting Always Iron.

The bridges are wholly Wrought Iron except the floor, which is wood, like the floors of ordinary Bridges.

We are prepared to make these structures in any quantities, at prices about as follows:

Railroad Bridges, 50 feet span, 8,000 lbs., \$17 50 per foot lineal.

Common Road or Turnpike, 50 feet span, 2600 lbs. \$5 75 per foot lineal.

Roofs, all iron, 50 feet width of building, \$25 per 100 square feet, part wood and part iron, from \$12 to \$20 per square.

Increase of span of bridges, or width of buildings makes an increase of price, but the increase in price is no more than the increase of wooden structures.



We can furnish iron of every size to work into Bridges and Roofs, and Railroads or other companies buying the right to use them and the iron of us, can make their own structures, one third less than the above prices. Our structures weigh only from 1-4 to 1-10 that of wood; difference in freight in a long distance buys our work. In a few days we will have at our factory, 497 West Third Street, in this city, four different specimens of our Roof, where the public can inspect them to their satisfaction. We beg them to give us a call, as all our work is warranted, and we ask no pay on ordinary jobs until the work is done and approved, payments being secured on contracts.

Office, No. 86 West Third street Cincinnati, O.
may 13. **MOSELEY & CO.**

LITTLE MIAMI AND COLUMBUS AND XENIA RAILROAD.

ON AND AFTER MONDAY, NOVEMBER 29th, 1858, Trains leave Cincinnati as follows:

9 A. M. DAY EXPRESS—Stopping at Way Stations.

4:15 P. M. ACCOMMODATION—For Xenia and Springfield, stopping at intermediate stations.

11:30 P. M. NIGHT EXPRESS—Stopping at Loveland, Morrow, Corwin, Xenia, and London.

Connections are Made by the 9 A. M., and 11:30 P. M. Trains for

ALL THE EASTERN CITIES.

The **NIGHT EXPRESS** Train leaving Cincinnati at 11:30 P. M., runs daily, except **SATURDAYS**. The other trains run daily, except **SUNDAYS**.

FOR THROUGH TICKETS

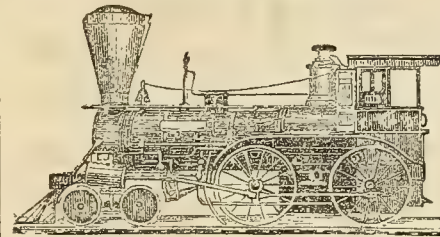
And all information, apply at the Offices, Walnut Street House, bet. Sixth and Seventh; No. 1 Burnet House; south-east corner of Broadway and Front streets, and at the Eastern Depot.

Trains run by Columbus time, which is seven minutes faster than Cincinnati time.

J. DURAND, Superintendent.

Omnibus calls for passengers.

CINCINNATI LOCOMOTIVE WORKS.



The undersigned are prepared to furnish Locomotive equal in efficiency and durability to the best Eastern manufacture. Also, Shaping and Slotting Machines suitable for railroad shops. Also, all kinds of heavy forging and casting done at short notice. Also, bolts for bridges cut with dispatch.

ap. 20 **MOORE & RICHARDSON.**

1858 CINCINNATI AND ST. LOUIS. 1858.

Through without Change of Cars,
OHIO & MISSISSIPPI
(BROAD GAUGE)



RAILROAD.

TWO DAILY TRAINS FOR
Louisville, Vincennes, Evansville,
Cairo, and St. Louis,

At 9:00 A. M. and 10:30 P. M.,

Connecting in St. Louis for all points in Kansas and Nebraska; Hannibal, Quincy and Keokuk; at St. Louis and Cairo for Memphis, Vicksburg, Natchez and New Orleans.

One Through Train on Sunday, at 10:30 P. M.
ACCOMMODATION TRAIN at 5:20 P. M., daily, (Sundays excepted,) for Seymour.

FOR THROUGH TICKETS

To all points West and South please apply at the Union offices, No. 2 Burnet House; south-east corner Broadway and Front street, and at the Depot, corner Front and Mill streets.

P. W. STRADER, General Ticket Agent.
Omnibuses call for passengers.

WOOD ENGRAVING.

BOOK ILLUSTRATIONS Views of Buildings, Machinery, &c., large Cuts for Snow Cards, Posters, &c. executed in the highest style of the art.

MIDDLETON, STROBRIDGE & CO.,
Jan 8 1y 119 Walnut st., Odd Fellows' Building

Monday, Nov. 29, 1858.

Cincinnati, Hamilton & Dayton RAILROAD.

FOUR DAILY TRAINS

LEAVE THE SIXTH ST. DEPOT, AS FOLLOWS;

6:00 A. M.—Dayton, Toledo, Sandusky and Detroit Mail Express. Also for Lima and Chicago.

6:00 A. M.—Richmond, Indianapolis and Chicago Express.

8:40 A. M.—Cleveland and Pittsburgh Express.

4:30 P. M.—Dayton, Sydney and Sandusky Night Express.

4:30 P. M.—Richmond, Indianapolis and Chicago Express.

5:40 P. M.—Hamilton Accommodation.

DAYTON TRAINS RUN THROUGH TO SANDUSKY WITHOUT CHANGE OF CARS.

THROUGH TICKETS

FOR
ALL EASTERN, WESTERN, NORTHERN
AND NORTH-WESTERN CITIES.

CONNECTIONS:

6:00 A. M.—Dayton Mail Train—For Springfield, Sandusky and all points on that road. Connects at Urbana for Columbus; arrives at Columbus at 12 noon; at Forest with trains east and west; at Clyde for Toledo, Detroit and Chicago, arriving at Detroit at 7:30 P. M. Also at Clyde with trains for Cleveland, Buffalo, &c. Passengers by this train dine at Forest, at 12:30 P. M.

This train also connects at Dayton with Dayton and Michigan road for Troy, Piqua, Sydney and Lima; connects at Lima for Fort Wayne and the West; at Sydney for Union, Muncie, Winchester, Union, Winchester and Muncie.

Also, connects at Dayton with Dayton and Western Road for points between Dayton and Richmond; with Greenville and Miami Road for Greenville, Union, Winchester and Muncie.

6:00 A. M. Train for Richmond, connects with Indiana Central Road for Indianapolis, Chicago, Lafayette, Terre Haute, St. Louis, and all Western cities.

Also, with Cincinnati and Chicago Road for Anderson, Kokomo, Logansport, and all points on the Wabash Valley Road.

8:40 A. M.—Cleveland and Pittsburgh Express, via, Delaware Cut on. For Cleveland, Dunkirk, Buffalo, New York and Boston. Also makes close connections at Gre-line for Pittsburgh, Philadelphia, Baltimore, and all Eastern cities.

4:00 P. M. Dayton Express, for Sandusky, and all points on that Road. Connects at Bellefontaine for Pittsburg, Philadelphia, Baltimore, etc.; at Forest for Chicago; at Clyde for Toledo; at Sandusky with C. & F. Road for Cleveland, Dunkirk and Buffalo.

This train also connects with Dayton and Michigan Road for Troy, Piqua and Sydney; at Sydney with the trains on the B. & I. Road for Pittsburg and the East.

4:30 P. M.—Indianapolis and Chicago Express.—Connects at Richmond for Indianapolis, Terre Haute and St. Louis.

Also, connects at Mattoon for Chicago and all points on the Illinois Central Road.

5:40 P. M.—Train for Hamilton and all way stations

RETURNING TRAINS

Leave Dayton at 8:20 A. M., 4:15 P. M., and 7:30 P. M.

Leave Hamilton at 7:00 A. M., 9:17 A. M., 11:30 A. M., 5:42 P. M., and 9:05 P. M.

TRAINS ARRIVE IN CINCINNATI.

From Hamilton 8:05 A. M., and 12:40 P. M.—From Dayton at 10:52 A. M., 6:50 P. M., and 10:10 P. M.

For further information and Tickets, apply to the Ticket Offices, Northeast corner of Front and Broadway, No. 169 Walnut street, near Fourth, or at the southeast corner of Fourth and Vine streets, or at the Sixth street depot.

D. McLAREN, Superintendent.

PAGE'S

PATENT PORTABLE CIRCULAR SAW MILLS.

THE subscribers are manufacturing, under patent, the above Mill, in connection with their improved Ratchet Double Setting Head Blocks.

They also keep on hand a full and complete assortment of Cast Steel Saws of their own manufacture, Saw and Mills, Shingle Machines, &c.

Office No. 15 Walnut street Cincinnati, Ohio
LEE & LEAVITT

Union Works, Baltimore.**POOLE & HUNT,****Iron Founders & General Machinists,**

ARE prepared with the most ample facilities to receive and fill at short notice and of best materials and workmanship, orders for

Steam Engines of any Size.

PLATE CAR WHEELS and CHILLED TIRES equal to any produced in the country.
WHEELS AND AXLES fitted for use.
HYDRAULIC PRESSES for pressing Oils and for other purposes.

MACHINERY of the most approved construction for Flouring and Saw Mills.

GASHOLDERS of any size, and Machinery and Castings of all kinds for Gas Works.

STEAM BOILERS and WATER TANKS of any size or description.

SHAFTING, PULLIES and HANGERS.
WROUGHT IRON PIPE and FITTINGS constantly on hand, and fitted up to order. ap2

**ANDERSON, GATES & WRIGHT,
STATIONERS, BOOKSELLERS,**

—AND—

**Blank Book Manufacturers,
No. 112 MAIN STREET,**

East Side, between Third and Fourth Streets.

KEEP constantly on hand a large and well selected assortment of everything in their line which they offer on favorable terms.

RAILROAD AND OTHER BLANKS.

Printed to order in the best manner.

Ruling done to order, of any Pattern.

Blank Books of every description, with or without printed headings, got up on short notice.

ANDERSON, GATES & WRIGHT,
(Successors to JACOB ERNST.)
112, Main Street, Cincinnati

**SCHENECTADY
Locomotive Works,**

SCHENECTADY, N. Y.

THESE WORKS HAVING BEEN ENLARGED and improved, and having received extensive additions to their tools and machinery, are prepared to receive and execute orders for

LOCOMOTIVE ENGINES,

AND TENDERS, AND

RAILROAD MACHINERY

generally, with the utmost promptness and despatch and in the best style.

The above works being located on the New York Central Railroad, near the center of the state, possess superior facilities for forwarding the work to any part of the country, without delay.

JOHN ELLIS, Agent.

WALTER McQUEEN, Supt. And by
N. B.—We have two Eight Foot engines on hand suitable for the 4 feet 10 in. gauge. Cylinders 16 inches diameter, 22 inches stroke. Driving wheels 44 feet diam.
December 18th, 1858.

**D. M. CARHART,
TURN-TABLE BUILDER.**

THE superiority of the undersigned's method of turning locomotive engines of the largest dimensions by a patent and "material" improved method, has been established beyond a precedent. From the fact of a long personal practice, and by experience, have spared neither pains or expense in improving them, whenever that experience has proved them in any particular deficient, my tables are capable of being turned, with an engine and tender, by one man, in less time than any other builder's.

For plans, or reference from fifty-eight different railroads in the United States and Canada, please address,
Respectfully Yours,

D. M. CARHART,
Box 183 Cleveland, Ohio.

oct29 6m

**T. F. RANDOLPH & BRO.
Mathematical Instrument Makers**

Removed to No. 67 West 6th St.
CINCINNATI O.

**McDANIEL & HORNER,
LOCO- AND CAR
MOTIVE SPRING****MANUFACTURED BY WILMINGTON, DEL.**

Locomotive and Car Springs of all descriptions manufactured on the most reasonable terms, made of the best STEEL, which we have manufactured to order from the BEST SWEDEN IRON. Orders from any part of the United States will be thankfully received and promptly attended to.

McDANIEL & HORNER.

All Springs ordered from a distance will be delivered on shipboard at Philadelphia free of charge.

References.

NORRIS BROTHER'S, Locomotive Builders, Philad.

A. C. GRAY, Prest. New Castle Manuf. Co.

U. WELLS, R. R. Car Manuf. Petersburg, Va.

I. R. TRIMBLE, Supt. Philad. R.R. Co.

May 19

M. B. MILLEN, Gen. Supt. C. R. R. Savannah, Ga.

EMERSON FOOTE, Supt. M. & W. R. R. Macon, Ga.

THOMAS DOUGHERTY, Master Mach. do.

THOS. SHARP, Supt. R. F. & P. R. R. Richmond, Va.

G. G. LOBDELL. H. S. M'COMES. D. P. BUSH.

**BUSH & LOBDELL,
Wilmington - - - - - Delaware.**

MANUFACTURERS OF

CHILLED WHEELS

AND

TIRES.

For R. R. Cars & Locomotive Engines,

ARE PREPARED TO

Execute Promptly Orders to any Extent
FOR THEIR

CELEBRATED WHEELS,
EITHER SINGLE OR DOUBLE PLATE.
WITH OR WITHOUT AXLES.

WHEELS FITTED

To Hammered or Rolled Axles.

In the best manner, at the shortest notice, and on the

Most Reasonable Terms.

ap23

TUBULAR RAIL.

Railroad Managers will be interested by an examination of the "TUBULAR RAIL," patented in Europe and America, by STEPHENS & JENKINS, Covington, Ky. These rails have decided advantages over any rail hitherto made, among them the following:

The "Tubular Rail" of 50 lbs. per yard has greater strength and elasticity, with the same outside surface as solid rails of 60 lbs. per yard.

Its density is greater.

Its welding nearer perfect, and

Its durability superior.

Unlike other new forms of rail, it can be put down upon the same chairs, and with the same fastenings, used with common T rails.

The arrangements to manufacture are such that these rails can be furnished of any American or Foreign make.

Reference is made to the officers of all the railroads in the vicinity of Cincinnati.

Additional particulars and circulars

addressing E. W. STEPHENS,
June 17.—1859. Cincinnati Ohio.

AMERICAN AND FOREIGN PATENT AGENT.

THOMAS D. STETSON,
SOLICITOR OF PATENTS,
And Consulting Engineer,
No. 5 Tryon Row, (near City Hall) N. Y.

RAILROAD IRON.

1000 TONS Railroad Iron, weighing about 100 lbs. per yard, "Erie" pattern, of best quality Welsh make, now ready for delivery, for sale by

March 1859. VOSE, LIVINGSTON & CO.,
Feb. 25.11. 9 South William St., N. Y.

HOYT'S WATER GAUGE

Has been very successfully introduced, and has proved essentially the Water Gauge for Locomotives, for which it is especially designed and adapted. From the fact of its indicating showing the true height of the water at all times, whether the engine be running or standing, it contributes much to safety and economy.

It is not subject to fracture like Glass Gauges. It depends upon no magnetic influence, which may or may not be subject to interference, and therefore unreliable. It is simple, easily kept in order, not subject to derangement, and if by accident deranged, it is at once discovered to the Engineer.

This Gauge has been in use for about two years, and has received the general approval of Railroad Officers and Engineers, by whom it has been tested. It is applicable to marine and stationary engines, as well as locomotives. For high pressure engines of the western river boats it is the best Gauge yet introduced.

The trade supplied at manufacturer's terms and prices, and orders respectfully solicited by

CHARLES W. COPELAND, Gen. Agent,
No. 66 Broadway, N. Y.

GEO. D. WINCHELL & BRO.,

172 Elm Street, bet. 4th and 5th,

CINCINNATI, O.

Sole Manufacturers of McGowan's Double Action

SUCTION & FORCE PUMP

AND

Compound Steam Pumping Engine,

WOULD respectfully invite the attention of RAILROAD Companies, Manufacturer Distillers, Miners, and the public generally to these Pumps, as the best Pump now in use and acknowledged by all who have used them to be perfect—simple in their construction, compact, durable and not likely to get out of order; well adapted for Steamboats, Railroad Water Stations, Distilleries, Breweries, Furnaces, Mines, Rolling Mills, Paper Mills, Factories, Wells, Cisterns, Stationary Fire Engines, Garden Engines and for all purposes where a Pump can be used. Also, for forcing a large body of water to a great height or distance rapidly.

Also, McGowan's Patent Ball Valve Pump, designed for Hot Liquids, Hot Oils, Molasses, &c. Hose Couplings Lead, Copper and Gas Pipe furnished at the lowest market prices.

Full and perfect satisfaction guaranteed in all cases, when properly put up according to directions.

Orders thankfully received and promptly filled at the shortest notice.

SILVER MEDAL. (The highest prize) awarded these pumps and Steam Pumping Engine at the late Fair Ohio Mechanics' Institute. June 18, 1855—17

Railroad Record.

E. D. MANSFIELD, - - - } Editors.
T. WRIGHTSON, - - - }

CINCINNATI:

THURSDAY MORNING, FEB. 10, 1893.

MARIETTA AND CINCINNATI RAILROAD.

The annual meeting of the stockholders of the M. & C. R. R. Co., was held in Chillicothe on Wednesday, the 6th of February. It was largely attended, and the proceedings were very unanimous. Over 34,000 votes were cast, representing about one and three quarter millions of dollars.

Directors and Officers.—The following gentlemen were elected Directors for the ensuing year, without opposition, to wit: Wm. P. Cutler, John Madeira, John Mills, Alphonso Taft, Beman Gates, Douglas Putnam, J. S. Niles, A. B. Walker, Hugh Smart, S. B. Keys, M. S. Cook, Wm. S. Nye, and Melvin Clark. These are all members of the old Board, except the one last named who takes the place of N. L. Wilson, formerly President.

The Board organized by electing the following officers:

President—WM. P. CUTLER.

Vice-President—BEMAN GATES.

Secretary and Treasurer—WM. S. NYE.

THE SAUT STE. MARIE CANAL.—The Governor of Michigan has sent a special message to the Legislature, accompanied by a report of the Board of Control of the Saut Ste. Marie Canal, which sets forth the value of that avenue of traffic. The Governor in recommending a sufficient appropriation to complete the canal works, remarks:

"The mineral wealth of the region bordering upon Lake Superior must find an outlet through this Canal. There is no prospect of obtaining any further assistance from the General Government. Should any accident occur by which the canal would be closed, the business of Lake Superior would become stagnant, and the loss to the capitalists who have invested their money in that region would in two seasons alone, amount to more than a sum sufficiently large to put the work beyond all risk of accidents. During the season of 1855, only four thousand six hundred and forty-three (4,643) tons of copper and iron passed through this Canal, the proceeds of our mines, while in the past season forty thousand five hundred and seventy-six (40,576) tons have passed through it. Here is a ten-fold increase of business in the past four years in these articles alone."

FREMONT AND INDIANA RAILROAD.—The cars are now running on this road between Fremont and Postoria. This road will very soon connect with the Dayton and Michigan Road at Lima, and it will then furnish the most direct route between Cincinnati and Toledo and Detroit, until the completion of the Dayton and Michigan Road to Toledo.

EXPERIENCE OF RAILROADS — MASSACHUSETTS.

We find, in the *American Railway Times*, a full report of the Massachusetts Railroads, which is valuable, as showing the experience of the Railroad System, in a State where, if any where in the world, railroads are overdone. In that State, there are 51 companies, having 1,629 88-100 miles of completed road. Massachusetts has a surface of 7,800 square miles, and a population of 1,100,000 people. There is, therefore, a mile of railroad to each five square miles of surface, and to each seven hundred inhabitants. In Ohio, which has more miles of Railroad than any other State, there is one mile of road to each fourteen square miles of surface, and to each eight hundred inhabitants. The proportion of Massachusetts is, therefore, considerably more; and if it can be fairly said, that any State has overdone railroad construction, it is Massachusetts. But, on the other hand, so large a proportion of the population is manufacturing, and there are so many large towns, that the intercourse of the people must be more frequent, and the parcels carried more numerous, than in an agricultural population. Thus, we may, on the whole, regard the Massachusetts Railroads as a very fair example of the results of this kind of public works, when carried to the extent which, in a few years, they will be. Let us analyse the results.

1. OF COST.—We take the following table from the *Times*:

"Fifty-one companies made returns of which we give the leading items in the aggregate, compared with the two preceding years:

	1856.	1857.	1858.
Number of Companies...	56	51	51
Length of Roads in miles.	1,518.29	1,632.65	1,669.88
Aggregate Capital.....	\$63,654,800	62,500,000	58,556,500
Amount paid in.....	50,776,744	50,453,049	48,136,164
The Aggregate cost.....	71,026,138	69,198,246	64,815,017
The total Earnings.....	10,884,667	10,915,692	8,974,365
Funded & floating debts.	22,678,328	22,416,488	20,394,719
Surplus earnings on hand.	2,531,394	2,832,189	2,994,138

"The returns under the caption of 'Assets' foot up \$6,164,441 50, and the 'Surplus Earnings,' are stated as above. Some of the companies return more surplus earnings than they do assets, and others the reverse. The items which go to make up these different sums, we suppose, vary somewhat in the different companies; some, classing their Sinking Funds in one, and others in both accounts."

So far as statistics are concerned, we can tell the *Times*, from considerable experience, there is no getting of accurate information about accounts, either from railroad companies, or, any body else, without the questions are put in the most specific and detailed manner, as if you were teaching a boy how to spell. By the way, we ought to agree in all the States upon some proper plan of getting statistics so that we can compare results.

In the above table, we see that 1,629 miles of road cost \$64,805,017; i. e., \$40,000 per mile. Undoubtedly this looks high; but, it is only what some roads in England cost, *before they begun!* That is, to get the Charter, and the Right of Way. The average cost of English railways is \$170,000 per mile! This is more than four-fold the cost of Massachusetts. Let us now look at the earnings.

2. OF EARNINGS.—The gross earnings were \$8,974,365. This is fourteen per cent. gross on the cost of construction. The gross earnings of 9,000 miles of English Road is but eight per cent. on the cost. But, we see at once, that if the English roads had only cost the same per mile as the Massachusetts roads, the earnings would have been immensely greater. The fact is, that the English roads having the benefit of a much denser population, and larger towns have, *relatively*, a vast deal more business. We may infer from this, that Railroads depend more upon a dense population, than upon any one element of success. There are roads in sparse populations which succeed; but, they do so, by becoming especially freight roads, and creating a channel of commerce where there was none before. The Baltimore and Ohio Road is such a one.

3. NET EARNINGS.—We have not this for all the roads; but, the return in the *Times* for forty-one companies, containing all of any importance, give this result:

Gross Earnings.....	\$8,506,703
Gross Expenses.....	4,813,944
Net Earnings.....	3,692,759

Now, we see that the *expenses* are 56 per cent., while the net receipts are but 44. It strikes us, that the expenses are too great. Yet, we do not doubt, that the *economy* of railroads is better understood in Massachusetts than in any other State. The fact is, we suspect, that with here and there an exception, our American roads do not anywhere economize as much as they might do. Another thing seems to be quite evident, but from the frail manner in which many of our roads were originally made, there goes a much larger sum to the account of *repairs*, than properly belongs to the expense account of the road. We know this is the case with Western Roads, on which half the sum put in *repairs* should be classed to construction.

4. NET PROFITS.—The net profits, no matter how applied, is the per cent. of *net* earnings on the total cost. For the year 1858, the Massachusetts Roads gives \$3,782,759 profit on \$62,178,535 cost. Thus 6.08 per cent.; not a bad result. To show that this is the result of permanent causes, we add that the *average* net profits in ten years have been about 6.25. The profits this year are not quite as great as the average. At the rates given for many in England, the stocks of Massachusetts roads ought to be above par.

At the rates of many in this country, they ought to average 85 per cent. This is not a bad business for the mass of roads in a country where this property is now so abused, and in a State where they are overdone.

The profits actually made by some of the roads are as follows:

1 Road made.....	11 per cent.
1 Roads made.....	8 " "
4 " ".....	7 " "
2 " ".....	7 " "
3 " ".....	6 " "
3 " ".....	5 " "
5 " ".....	5 " "
3 " ".....	3 " "
5 " ".....	3 " "

These are not bad profits, and we suspect if all the mercantile establishments were examined, they would not present a better average than the Massachusetts railroads.

5. OF FREIGHTS.—The forty-one roads contained in the last table, carried 3,174,909 tons, or an average of 80,000 tons each. The largest amount, (437,000) tons was carried over the Western Railroad, which brings to Boston a great deal of western produce. On the whole, the Massachusetts Railroads are not remarkable for their freight business, nor could it be expected. Massachusetts sends off no products of the soil; but, does create some traffic by the articles she consumes.

6. OF PASSENGERS.—The number of passengers carried in the cars was 8,413,789; which is 5,280 per mile of road. Here we see at once the immense advantage of all densely populated country to railroads. It is true, that some of the roads make as much by freight as by passengers; but, they only do it, by charging more, and in peculiar cases.

LETTER FROM W. WRIGHTSON.

SANTA RITA, ARIZ., Jan. 22, 1859,

T. WRIGHTSON, Esq.:

Dear Sir:—Since my last letter to you, the main body of the party and six of the wagons have arrived at the mines. When I wrote you before they were encamped below Tubac, where they remained over Sunday. On Monday morning the train started to cut a new road to the mines. This, in a country like ours, is no small matter—a single view of the ground would convince the most skeptic on this subject. A brief description may serve, in some measure, to convey an idea of the task. The Santa Cruz River flows in a northerly direction from Calabazas towards Tubac and Tucson. The bottom lands of this stream are in many places covered with thick forests of Mezquite, and vary in breadth from half a mile to a mile on each side of the stream. Adjoining these rise the foot slopes of the mountains, which usually begin in a rather abrupt range of hills, covered with boulders of various sizes from six inches to two feet in diameter, when you ascend this

slope, you reach the Meza or long foot slope of the mountain. This, in some instances, extends for miles by a gradual ascent, till, as you near the peaks, the ground becomes again broken and rugged, and you frequently cross the outer spurs, rising short and precipitous, till at last you stand at the foot of the mountains towering up towards the clouds. A glance behind you shows that every little depression in the mountain widens as it approaches the Meza and there forms deep canons or valleys running down to the river, some of which are rugged and impassable, others are gravelly beds, lined with steep banks on either hand, and covered with the same huge boulders that characterize the first ascent from the river. Roads are made either up these canons or on the Mezas, but wherever there is necessity to cross from one to the other, there is sure to be hard work for those who make the road in throwing out rocks—hard work for the mules and hard swearing for the drivers—for every Mexican driver can swear in English as plainly as a native trooper.

We set out from camp immediately after breakfast, half our party shouldering axes and the rest ready to haul away the timber as it was felled, or to throw out rocks as the case might be. In the spot we selected, our road lay through the Mesquite forest nearly a quarter of a mile, and as we had numerous hands, and all worked with a hearty good will, we soon made the foot of the first rise from the river bottom. Here we pitched away the rocks for some two or three hundred yards and the wagons came up freely. The Meza gained we followed it, cutting away Mesquite bushes, clearing away rocks, and tramping down the grass—all of which is very easily written but takes time and hard work to do—till we came to the edge of the first canon, which we had to cross. The spot selected was where a little run of water had partially worn the banks on both sides. Here, as there was a pretty good camping ground, and the animals were somewhat weary, we camped for the night, having worked hard all day, and made between nine and ten miles from our morning camp. After our meal we went down into the canon, and by piling the heavy rocks which we rolled from the track on the hill side down into the valley, and then covering them with smaller ones, we made a tolerably good descent, and the boys being tired, we sent them back to camp, while we went on and selected the route up the opposite slope. In the morning we roused the camp early, and with all hands went over the canon and commenced improving the road. We rolled away the rocks, cut down the Palma plants, and considerably smoothened its appearance, but as the hill was steep we found it necessary either to double teams or all hands to lift on the wheels. We chose the latter course, and you would

have been amused could you have witnessed the scene. Just imagine a large wagon heavily loaded, with eight mules in front pulling with all their might, and a dozen men behind pushing with equal ardor, and then by way of scenery, put in a Mexican driver, cracking his whip and encouraging his mules by language of a very forcible nature, but which propriety forbids me repeating, and the boys behind sometimes cracking a joke and sometimes hunting, and you will have, it is true, a comical picture, but true to the life. This hill climbed, the Meza between this and the next canon was not much over a mile wide, but very rough, and we threw out a good many rocks, cleared away an occasional bush, etc., till we came again to the rise just before entering the second canon. Here it took both man power and mule power to coax the wagons over, for the boulders became very large and the pulling very heavy. The descent into this canon and the ascent from it, was more easily made than in the previous one, but still had an opportunity on some of the wagons to try the effect of continued rotary motion on the muscular system. The brow of the hill being gained, we sought a camp ground and rested for dinner, having gained nearly two miles for our morning's work. Dinner over and the mules rested, we started again, and crossed the third and last canon much in the same way as before; from this point the road followed the valley towards the buildings, where we arrived before sunset. Ours are the first wagons that have ever visited the Santa Rita Mountains, and we have so improved the road that it will not be a very difficult matter for others to follow. Our party were all pleased with the location of the buildings and the improvements already made. The following morning many of them went on a visit to the mines. On their return it was amusing to witness the effect of the first view of a silver mine. There is something in the name of Silver Mine, that inspires most persons with great ideas. They imagine a thousand things filled with splendor and pomp, but, above all, they expect to see the glittering metal shine in every corner, nook and crevice. These gay dreams were never realized but once, and that was when Aladdin visited the mystic grotto, with his wonderful lamp in hand. Every thing there was resplendent and shone with gorgeous beauty before his dazzled eyes. Unfortunately, our boys left the wonderful lamp behind, and when they reached the Salero they found only a large opening in the mountain, with a vein of colored ore distinctly marked. This vein quietly and quickly told them of hard labor in getting out the ore, hard work in crushing it, and hard work in smelting it. They returned to the house wiser on the subject of silver mines, and quite satisfied that nothing but hard work would develop silver mines.

Since the arrival of this portion of our train, we have erected a temporary store-house, by putting up an adobe wall two feet six inches high, and stretching our large tent over it. We have rigged up a carpenter shop, and set up our blacksmith forge, have begun additional rooms to make our party more comfortable, and laid the foundation for the blacksmith shop; commenced a windlass for the mine, and a mule-power. I have also visited the Bustillo Mine, and intend to place a party at work there on Monday next—we are progressing very well with the cleaning out of the Salero, and have gone considerably farther down than this mine has been opened before for at least a hundred years. The depth of the shaft is conclusive evidence to me, that the early workers found it profitable. If they had not, they never would have wasted so much labor on it. We are now anxiously expecting to reach bottom very soon and we can then tell how true the traditinary reports of its riches are.

The Bustillo Mine is situated about three quarters of a mile from the Salero in a different spur of the mountain, and crosses the hill in an oblique direction. The main shaft is near the summit, and is now filled with water. It must be a long time since any attempt was made to work this mine, as a Mesquite tree grows in the entrance. Whoever opened this mine prospected the whole vein nearly a quarter of a mile, and opened trenches, and erected monuments at intervals this whole distance. Above the main opening already mentioned, is another which has been sunk to the depth of some fifteen feet and which shows the vein very distinctly. If the whole vein continues regular and similar to the ore in this shaft, I have no doubt it will pay well. We took samples of ore from various parts of the vein, and attempted an assay, but owing to the want of suitable apparatus and material, could obtain no reliable result. I have, however, sent specimens over to Cerro Colorado, and will report the result when I hear from them. At some distance from this mine is another known as the Chrystal Mine, which I have not yet had an opportunity to visit.

The short time I have been here, and the pressure of my engagements in setting all the machinery of the company at work, renders anything like theorizing on the general characters of the veins and their origin, if not improper, at least premature. The Salero, however, in its general appearance, would indicate some grand convulsion of nature, which had thrown up the precious metal from below in a melted state, into a crevice which narrowed as it reached the surface, and finally became little more than a vapor impregnating the rocks with a mixture of silver, copper, lead, antimony and arsenic. Lower in the vein these metals become more distinct—but to obtain the ores as rich as we could desire,

we should go down at least two or three hundred feet. I shall endeavor to have Mr. Kustell from Cerro Colorado, visit the mines in a few days, and shall expect much from his practical judgment. In the meanwhile the business of cleaning out the old work will be pressed forward vigorously. During the past week we have removed over forty tons of the old rubbish from the mines.

The business of silver mining is one which, as far as I can now judge, is likely to pay in proportion to the labor, enterprise and capital invested in it, assuming, of course, that the mine is a good one. If we have the capital only to work ten men, we shall only get the profit of ten men's labor. If we have the capital and means of employing a hundred, we shall reap the profit of the labor of that one hundred, and so on. We must sink our shafts, and run our galleries out into the vein, and otherwise do considerable dead work before we can make the work we do pay. We must then erect arastres, build furnaces and patios, and then we shall get out silver. The Company may rest assured that we shall do all this in the quickest possible manner, and use all our energies, and every labor saving contrivance that we can devise, to bring about the desired results. In my next report, I shall hope to tell them something more definite in regard to the character of the mines. Meanwhile,

I am truly yours,

W. WRIGHTSON.

THE RIVER SYSTEM OF BRITISH CENTRAL AMERICA.

Geographical Memoir upon the Navigable Streams of the Basin of Lake Winnipeg, and Upon the Areas Adjacent to Minnesota.

[Read by James W. Taylor, from a Committee appointed by the St. Paul Chamber of Commerce, and directed to be published, Jan. 22, 1859.]

[CONCLUSION.]

Such is the immense system of river communication which will welcome the first steamboat upon the Red River of the North. The area comprised within the rivers, converging to Lake Winnipeg, is estimated to contain 400,000 square miles; and the evidence now reaching us from every quarter is irresistible, that a fertile soil, favorable climate, useful and precious minerals, fur bearing and food yielding animals—in a word, the most lavish gifts of nature, constitute highly favorable conditions for the organization and settlement of prosperous communities. Familiar as the American public is with the progress of Mississippi States, the Committee are inclined to review the basin of Lake Winnipeg, whose skeleton of navigable rivers has just been presented in outline, from our western stand point of its capacity to be divided and occupied as States or provinces, each having an average of 50,000 square miles. Starting, therefore, from that point of the western boundary of Minnesota, which is now or may be improved to become the head of steamboat navigation on the Red River, the indulgence of the Chamber is asked, while we proceed, in convenient subdivisions, to group a considerable number of facts, geo-

graphical and otherwise, demonstrating the future importance of that river navigation, which is to be the avenue to the district inclosed between latitudes 49 and 55 and extending from the shores of Lake Winnipeg to the Rocky Mountains.—*Pioneer and Democrat.*

THE AMERICAN VALLEY OF THE RED RIVER.—Of this district Lac Traverse in one direction, and Otter Tail Lake in a line nearer North from St. Paul—either point not more than two hundred miles distant—may be regarded as its extreme Southern limits; Pembina and the international frontier, the Northern; while the longitude of Red Lake on the East, and of Minnewakan or Spirit Lake, on the West, are convenient designations of the remaining boundaries. This area would extend from about latitude 46 to 49 degrees, and from longitude 95.30 to 99 degrees.

Capt. Pope, in his explorations of 1849, remarks that for fifty miles in all directions around Otter Tail Lake, is the garden of the Northwest. The outlet of the Lake, constituting the source of the Red River of the North, has been very favorably described by Dr. Owen, of the United States Geological Survey. It presents a succession of lakes and rapids, while, at other points, rolling prairies extend from its banks, crested with beautifully dispersed groves of timber. It was in this section of Minnesota, that the magnesian limestone containing silurian fossils, identical with those in the bluffs of the Mississippi below St. Paul, was recognized by Dr. Owen *in situ*—showing that the primary formation, which divides Minnesota from Northeast to Southwest, is successful to the Northwest by the ascending series of sedimentary rocks.

Many of our citizens have frequently traversed the district just named, and their testimony is, that Westward, from Otter Tail Lake, for at least one hundred miles, and Northward to Red Lake, if not beyond, no more favorable distribution of beautiful prairie, and forests can be imagined. The lakes are numerous, but small, and almost invariably skirted with timber, the sugar maple largely preponderating. Seldom is the traveler out of sight of these groves, while the soil is unsurpassed.

From Dr. Owen's Geological Report, it appears, that below the head of navigation, the western bank of the Red River is a vast plain, but on the east, while the country is level, timber is more abundant on the river banks; the soil is congenial to the ash, which attains a large size; below the mouth of Red Lake River, chalybeate springs ooze from the clay banks; saline springs are also found, and all accounts concur, that hardly an acre, but is adapted to the cultivation of wheat. The great staple, with the aid of machinery, will hereafter be cultivated more advantageously over the North-western area of the continent, than in the Mississippi basin.

ASSINIBOIA.—We believe this is the official designation of this District of British America, occupied by the Selkirk settlements. It embraces the lower or Northern section of the Red River, and the productive valley of the Assiniboin. Here is a civilized and interesting community of 10,000 souls—with schools, churches, a magistracy, and a successful agriculture. Its trade, consisting largely of the exchange of furs, is concentrating at Saint Paul, and is estimated dur-

ing the year 1858, to have amounted to \$1,000,000.

The Committee would refer, for fuller details in regard to the community at Selkirk, to the numerous publications recently made. The most important of these is a document circulated by the Canadian Government—the Report of an Exploring Expedition—which, among other interesting statements, shows that the soil and climate are even more favorable to agriculture than the vicinity of Toronto. The Minnesota farmer recognises in these details a remarkable coincidence with his own experience.

CUMBERLAND.—But north of the Red River Settlement, is a region almost a discovery of recent explorers, which is even more attractive than the prairie district contiguous to the Red and Assiniboin Rivers. Immediately west of Lake Winnipeg, are Lakes Winnipegosis and Manitoba, with an outlet flowing into Lake Winnipeg in latitude 52 degrees. Tributary to Lake Winnipegosis, are the Red Deer and Swan Rivers, which drain a country of rare beauty and fertility. A traveler, writing to a Canadian newspaper, describes its general features as rich prairies, interspersed with belts of heavy oak and elm; while the itinerary of Sir George Simpson affords a most glowing picture of the sources of Swan River. Under date of July 14th, he observes: "In this part of the country we saw many sorts of birds, geese, loons, pelicans, ducks, cranes, two kinds of snipes, hawks, owls, and gulls; but they were all so remarkably shy that we were constrained to admire them from a distance. In the afternoon we traversed a beautiful country with lofty hills and long valleys, full of sylvan lakes, while the bright green of the surface, as far as the eye could reach, assumed a foreign tinge, under an uninterrupted profusion of roses and blue bells. On the summit of one of these hills we commanded one of the few extensive prospects we had of late enjoyed. One range of heights rose behind another, each becoming fainter as it receded from the eye, till the farthest was blended in almost undistinguishable confusion with the clouds, while the softest vales spread a panorama of hanging copses and glittering lakes at our feet."

As Cumberland House is situated north of the valley of Swan River, upon the Saskatchewan, its name has been chosen to designate the district between longitudes 100 and 105, and from latitude 52 deg. to 55 deg. An equal area immediately south, and between the parallels of 49 deg. and 52 deg. is no less attractive and fertile.

SASKATCHEWAN.—There remains from longitude 105 to 115, and from latitude 49 to 55 degrees, the respective valleys of the North and South Saskatchewan, ample in area and resources for four States of the extent of Ohio. We propose to consider the whole interval westward from the junction of the two rivers to the Rocky Mountains without subdivision, as indeed, it is presented by Colton's Map of North America.

The prairie districts adjacent to the South Saskatchewan, are described by the Canadian explorers as fully equal to the rich alluvial plains of the Red and Assiniboin Rivers; while Sir George Simpson's sketches of his route from Fort Carlton to Fort Edmonton, are suggestive of a superior agricultural region. During his first day's route, he describes the country "as so picturesque in its character, that almost every commanding position presented the elements of a

picturesque panorama." The next day he encamped near a large lake; and on successive dates he refers to "bands of buffaloes in all directions, to the number of about five thousand," "abundant game," "bold scenery," "delicious wild fruits," "luxuriant crop of the vetch or wild pea, almost as nutritious a food for cattle and horses as oats," "a seam of coal ten feet in thickness," etc.

But there is an authority in regard to the more western portions of the Saskatchewan, whom the Committee are solicitous to bring prominently before the public. We refer to Father De Smet, the devoted Jesuit Missionary to the Indians of Oregon, mentioned by Gov. Stevens, in a recent address before the New York Geographical Society, as "a man whose name is a tower of strength and faith," possessing high scientific attainments and great practical knowledge of the country. His "Oregon Missions" is a publication of much interest, consisting of letters to his superiors; and a portion of this volume narrates his explorations and adventures in the Saskatchewan valleys of the Rocky Mountains. In September, 1849, he left the source of the Columbia River, in latitude 50, and crossed the Rocky Mountains, descending their eastern slope in latitude 51. He entered on the 18th of September, "a rich valley, agreeably diversified with meadows, forests, and lakes—the latter abounding in salmon trout." This was a mountain valley, however, and it was not till three days afterwards that he reached Bow River or the south fork of the Saskatchewan. Thence he continued northward, noticing sulphurous fountains and coal on the Red Deer, a branch of the Bow River. Descending the valley of the Red Deer, which is also described in very glowing terms, at length he emerged upon what he describes as "the vast plain—the ocean of prairies."

On the evening of the same day, the Missionary reached and was hospitably received at the Rocky Mountain House, latitude 53, and longitude 115; and on the 31st of October started for another journey on the plains; but after two weeks absence was compelled to seek refuge from the approach of winter (now the middle of November) at Edmonton House on the upper Saskatchewan. From this shelter he thus writes in general terms:

"The entire region in the vicinity of the first eastern chain of the Rocky Mountains serving as their base for thirty or sixty miles, is extremely fertile, abounding in forests, plains, prairies, lakes, streams and mineral springs. The rivers and streams are innumerable, and on every side offer situations favorable for the construction of mills. The northern and southern branches of the Saskatchewan water the district I have traversed for a distance of three hundred miles. Forests of pine, cypress, thorn, poplar and aspen trees as well as others of different kinds occupy a large portion of it, covering the declivities of the mountains and banks of the rivers.

"These, originally, take their rise in the highest chains, whence they issue in every direction like so many veins. The beds and sides of these rivers are pebbly and their course rapid, but as they recede from the mountains they widen, and the currents lose something of their impetuosity. Their waters are usually very clear. The country would be capable of supporting a large population, and the soil is favorable for the produce of barley, corn, potatoes, and beans, which grow here

just as well as in the more southern countries.

"Are these vast and innumerable fields of hay forever destined to be consumed by the fire or perish in the autumnal snows? How long shall these superb forests be the haunts of wild beasts? And these inexhaustible quarries, these abundant mines of coal, lead, sulphur, iron, copper, and saltpetre; can it be that they are doomed to remain forever inactive? Not so. The time will come when some laboring hand will give them value; a strong, active, and energetic people are destined to fill this spacious void. The wild beasts, will, ere long, give place to our domestic animals; flocks and herds will graze in the beautiful meadows that border the numberless mountains, hills, valleys and plains of this extensive region."

Life at Edmonton during the winter season is thus sketched:

"The number of servants, including children, is about eighty. Besides a large garden, a field of potatoes and wheat belonging to the establishment, the lakes, forests, and plains of the neighborhood furnish provisions in abundance. On my arrival at the Fort, the ice house contained thirty thousand white fish, each weighing four pounds, and five hundred buffaloes, the ordinary amount of the winter provisions. Such is the quantity of aquatic birds in the season, that sportsmen often send to the Fort carts full of fowls. Eggs are picked up by thousands in the straw and weeds of the marshes. I visited Lake St. Anne (a missionary station fifty miles northwest from Edmonton.) The surface of this region is flat for the most part, undulating in some places, diversified with forests and meadows, and lakes teeming with fish. In lake St. Anne alone, were caught, last autumn, more than seventy thousand white fish, the most delicious of the kind; they are taken with the line at every season of the year.

"Notwithstanding the rigor and duration of the winter in the northern region, the earth in general appears fertile; vegetation is so forward in the Spring and Summer that potatoes, wheat and barley, together with other vegetables of Canada, come to maturity."

On the 12th of March, Father De Smet started on his return trip, proceeding with sledges drawn by dogs over the snow to Fort Jasper, situated northwest from Edmonton on the Athabasca river, half a degree north of latitude 54. Here occurred the following hunting adventure:

"Provisions becoming scarce at the Fort, at the moment when we had with us a considerable number of Iroquois from the surrounding country, who were resolved to remain until my departure in order to assist at the instructions, we should have found ourselves in an embarrassing situation had not Mr. Frazer come to our relief by proposing that we should leave the Fort and accompany himself and family to the Lake Islands, where we could subsist partly on fish. As the distance was not great, we accepted the invitation, and set out to the number of fifty-four persons and twenty dogs. I count the latter because we were as much obliged to provide for them as for ourselves. A little note of the game killed by our hunters during the twenty-six days of our abode at this place, will, perhaps, afford you some interest; at least it will make you acquainted with the animals of the country, and prove that the mountaineers of Athabasca are blessed with good appetites. Animals killed—twelve

moose deer, two reindeer, thirty large mountain sheep or big horn, two porcupines, two hundred and ten hares, one beaver, two muskrats, twenty-four bustards, one hundred and fifteen ducks, twenty-one pheasants, one snipe, one eagle, one owl; add to this from thirty to fifty five white fish and twenty trout every day."

Father De Smet soon after returned to the western slope of the Rocky Mountains, whither we will not follow him.

We have thus exhibited the natural features of the great Central District, soon to be brought into close commercial relation to Minnesota by the navigation of these important rivers of the North-west. We have rested our observations, hitherto, upon latitude 55 degrees, but the suggestions already uttered in the British Parliament, of an extension of canal to the navigable tributaries of the McKenzie, will warrant the consideration of a territorial division beyond that limit.

ATHABASCA.—The valleys of the Peace and Athabasca Rivers eastward of the Rocky Mountains, from latitude 55 deg. to 58 deg., share the Pacific climate in a remarkable degree. The Rocky Mountains are greatly reduced to breadth and mean elevation, and through the numerous passes between their lofty peaks the winds of the Pacific reach the district in question. Hence it is, that Sir Alexander McKenzie, under date of May 10, mentions the exuberant verdure of the whole country—trees about to blossom, and buffalo attended by their young. During the late Parliamentary investigation, similar statements were elicited. Dr. Richard King, accompanied an expedition in search of Sir John Ross, as "Surgeon and Naturalist," was asked what portion of the country visited by him was valuable for the purpose of settlement? In reply, he described "as a very fertile valley," a "square piece of country," bounded on the south by the Cumberland House, and by the Athabasca Lake on the north. His own words are as follows:

"The sources of the Athabasca and the sources of the Saskatchewan include an enormous area of country. It is, in fact, a vast piece of land surrounded by water. When I heard Dr. Livingston's description of that country, which he found in the interior of Africa within the Equator, it appeared to me to be precisely the kind of country which I am now describing. * * * It is a rich soil, interspersed with well wooded country, there being growth of every kind, and the whole vegetable kingdom alive." When asked concerning the mineral productions, his reply was, "I do not know of any other mineral except limestone; limestone is apparent in all directions. * * *

The birch, the beech and the maple are in abundance, and there is every sort of fruit." When questioned farther, as to the growth of trees, Dr. King replied by a comparison "with the magnificent trees round Kensington Park, in London." He described a farm near Cumberland House, under very successful cultivation—luxuriant wheat, potatoes, barley and domestic animals.

The Committee will not extend, by any generalization of their own, these geographical statements. They prefer, in conclusion, to dispose of the subjects of climate and population, in the impressive language of a writer in the *Knickerbocker Magazine* for October, 1858:

"Here is the great fact of the Northwestern areas of this continent. An area not inferior

in size to the whole of the United States east of the Mississippi, which is perfectly adapted to the fullest occupation by cultivated nations, yet is almost wholly unoccupied, lies west of the ninety-eighth meridian and above the forty-third parallel, that is, north of the latitude of Milwaukee, and west of the longitude of Red River, Fort Kearney, and Corpus Christi. Or, to state the fact in another way, east of the Rocky Mountains and west of the ninety-eighth meridian, and between the fortieth and sixtieth parallels, there is a productive, cultivable area of five hundred thousand square miles. West of the Rocky Mountains, and between the same parallels, there is an area of three hundred thousand square miles.

"It is a great mistake to suppose that the temperature of the Atlantic coast is carried straight across the continent to the Pacific. The isothermal defect, greatly to the North, and the temperature of the Northern Pacific areas are paralleled in the high temperatures in high latitudes of Western and Central Europe. The latitudes which inclose the plateaus of the Missouri and the Saskatchewan, in Europe inclose the rich central plains of the continent. The great grain growing districts of Russia lie between the 45th and 60th parallels, that is, North of the latitude of St. Paul, Minnesota, or Eastport, Maine. Indeed, the temperature in some instances is higher for the same latitudes here than in Central Europe. The isothermal of 70 degrees for the summer which on our plateaux ranges from along latitude 50 to 52 deg. in Europe, skirts along Vienna and Odessa in about parallel 45 degrees. The isothermal of 50 degrees for the year runs along the coast of British Columbia, and does not go far from New York, London, and Sebastopol. Furthermore, dry areas are not found above 47 degrees, and there are no barren tracts of consequence North of the Bad Lands and the coteaux of the Missouri; the land grows grain finely and is well wooded. All the grains of the temperate districts are here produced abundantly, and Indian corn may be grown as high as the Saskatchewan.

"The Buffalo winter as safely on the Upper Athabasca as in the latitude of St. Paul, and the spring opens at nearly the same time along the immense line of plains from Saint Paul to Mackenzie's river. To these facts, for which there is the authority of Blodgett's Treatise, on the Climatology of the United States, may be added this, that to the region bordering the Northern Pacific the finest maritime positions belong throughout its entire extent, and no part of the west of Europe excels it in the advantages of an equable climate, fertile soil, and commercial accessibility of coast. We have the same authority for the statement that in every condition forming the basis of national wealth, the continental mass lying westward and north westward from Lake Superior, is far more valuable than the interior in lower latitudes of which Salt Lake and Lower Mexico are the prominent known districts. In short, its commercial and industrial capacity is gigantic. Its occupation was coeval with the Spanish occupation of New Mexico and California. The Hudson's Bay Company has preserved it an utter wilderness for many long years. The Frazer River discoveries and emigration are facts which the company can not crush: Itself must go to the wall, and now the population of the great north-western areas begins."

In view of the foregoing, especially when

considered in connection with the probable organization of the Province of Saskatchewan at the next session of the British Parliament, your committee entertain great confidence that the announcement of a steamboat upon Red River in June, 1859, would arrest such a degree of interest that the travel and transportation of the next season would be very considerable—probably ample to remunerate the enterprise; while the future increase would be fully equal to the extraordinary progress of steamboat interests upon the Mississippi.

TRADE AND COMMERCE OF THE NEW YORK CANALS.

Our annual comparative tables exhibiting the quantity and value of all the articles coming to tide water by the Erie and Champlain Canals, will be found subjoined. These tables we have compiled from the returns made by the Collectors at New York, Albany, West Troy, and Waterford, and corrected by the Clerks in the State Auditor's office.

Much regret is expressed by those engaged in the Flour, Grain, and Provision business, that more care is not bestowed by those in charge of compiling the statistics of the Canals, when so much is involved in their publication. The weekly statements put forth during the past navigable season were so grossly erroneous as to attract the attention of the trade. More care should be taken in their compilation and competent clerks should be placed in those offices from which emanate the tide water reports.

The subjoined tables are so simply arranged as to need no explanation. That they are still erroneous in some particulars, there can be no doubt, but it is impossible now for those in the Auditor's office, to further correct them, without a thorough examination of all the clearances in the four offices.

The following statement exhibits the quantity of the various articles named arriving at tide water by the Erie and Champlain Canals during the seasons of 1857 and 1858:

THE FOREST.			
ARTICLES.	1857.	1858.	
Furs and Peltry, pound.	6,000	41,000	
<i>Products of Wool.</i>			
Boards and Scantling, 1000 feet.	346,605,000	458,745,311	
Shingles, M.	89,224	47,631	
Timber, 100 c ft.	2,737,400	1,745,516	
Staves, pound.	255,596,100	205,721,517	
Wood, cord.	9,638	8,904	
Ashes, Pot and Pearl, barrel.	26,244	9,146	
Total of the forest, tons.	798,986	817,613	
AGRICULTURE.			
<i>Product of Animals.</i>			
Pork, barrel.	11,219	38,790	
Beef, "	13,094	75,848	
Bacon, pound.	2,120,000	3,166,466	
Cheese, "	4,344,000	10,471,404	
Butter, "	1,718,000	3,967,433	
Lard, Tallow and Lard Oil, pound.	634,000	4,107,494	
Wool, pound.	1,686,000	2,879,675	
Hides, "	908,000	421,366	
Total product animals, tons.	9,866	30,790	
<i>Vegetable Food.</i>			
Flour, barrel.	635,546	1,898,904	
Wheat, bushel.	5,763,400	8,325,116	
Rye, "	169,465	461,758	
Corn, "	5,515,938	6,600,917	
Corn Meal, barrel.	39	426	
Barley, bushel.	1,727,208	3,058,432	
Oats, "	2,946,312	5,180,324	
Brans and Ship Stuffs, pound.	28,016,000	51,311,701	
Peas and Beans, bushel.	19,433	342,448	
Potatoes, bushel.	773,133	1,634,000	
Dried Fruit, pound.	170,000	435,001	
Total Vegetable Food, tons.	550,617	893,776	
<i>All other Agricultural Products.</i>			
Cotton, pound.	84,000	374,760	
Unmanufact'd Tobacco, pound.	936,000	1,079,552	
Hemp, "	134,000	257,275	

Clover and Grass Seed, " ..	442,000	2,589,195
Flax Seed, " ..	1,214,000	367,571
Hops, " ..	492,000	1,599,452
Total all other Ag. P'ts, tons ..	1,671	5,223
Total Agriculture, tons.....	551,894	929,789
MANUFACTURES.		
Domestic Spirits, gallon.....	1,768,560	3,373,013
Oil Meal and Cake, pound.....	12,695,000	17,120,193
Leather, " ..	7,246,000	11,265,921
Furniture, " ..	108,000	1,308,699
Bar and Pig Lead, " ..	336,000	2,273,343
Pig Iron, " ..	56,194,000	61,163,949
Bloom and Bar Iron, " ..	19,081,000	20,801,852
Castings and Iron Ware, pound ..	3,412,000	1,536,224
Domestic Woolens, pound.....	353,000	275,275
Domestic Cottons, " ..	1,244,000	1,917,275
Domestic Salt, " ..	2,718,000	2,137,593
Foreign Salt, " ..	44,000	51,000

Total Manufactures, tons... 53,611 73,941

MERCHANDISE.		
Sugar, pound.....	10,000	14,868
Molasses, " ..		3,000
Coffee, " ..	84,000	3,215
Nails, spikes & horse-shoes, lbs.	3,710,000	4,539,923
Iron and Steel, pound.....	3,550,000	5,154,166
Railroad Iron, " ..	4,022,000	5,796,996
Print Enamel, Crockery, and		
Glassware, pound.....	210,000	274,632
All other merchandise ..	20,362,000	14,740,176

Total Merchandise, tons.... 16,957 15,233

OTHER ARTICLES.		
Live Cattle, hogs and sheep, lbs.	462,000	3,700
Stone, Lime and Clay, pound.....	135,670,000	93,912,128
Gypsum, " ..	3,162,000	1,418,891
Mineral Coal, " ..	28,160,000	29,471,998
Copper Ore, " ..	13,606,000	4,862,345
Sundries, " ..	186,418,000	165,374,203

Total other Articles, tons... 183,769 147,546

Total Tons..... 1,617,187 1,985,112

The following statement exhibits the estimated value of the various articles named, arriving at tide water by the Erie and Champlain Canals, during the seasons of 1857 and 1858:

THE FOREST.		
ARTICLES.	1857.	1858.
Fur and Peltry.....	\$7,600	\$53,300
<i>Product of Wood.</i>		
Boards and Scantling.....	5,397,281	6,806,636
Shingles.....	3,284	169,449
Timber.....	432,732	289,663
Staves.....	1,130,182	83,296
Wood.....	60,754	40,671
Ashes, Pot and Pearl.....	607,320	270,106
Total value of the Forest....	\$8,118,702	\$9,134,122
<i>Products of Animals.</i>		
Pork.....	\$218,751	\$62,678
Beef.....	1,311,16	83,867
Bacon.....	922,000	332,441
Cheese.....	339,240	840,076
Butter.....	366,430	799,463
Lard, Tallow and Laid Oil.....	78,480	451,824
Wool.....	724,980	1,142,510
Hides.....	227,000	87,035
Total value of Animals.....	\$2,350,787	\$5,105,935
<i>Vegetable Food.</i>		
Flour.....	\$3,456,115	\$10,443,972
Wheat.....	8,587,496	9,188,115
Rye.....	160,992	323,230
Corn.....	4,467,902	4,662,642
Morn Meal.....	31	1,278
Barley.....	1,463,127	2,752,590
Oats.....	1,557,313	2,310,118
Bran and Ship Stuffs.....	285,110	436,149
Peas and Beans.....	121,518	428,661
Potatoes.....	579,851	673,332
Dried Fruit.....	17,000	43,560
Total value of Veg. Food....	\$22,696,464	\$31,262,927
<i>All other Agricultural Products.</i>		
Cotton.....	\$10,920	\$48,719
Unmanufactured Tobacco.....	168,480	1,660
Hemp.....	10,720	15,437
Clover and Grass Seed.....	48,620	193,744
Flax Seed.....	37,620	7,424
Hops.....	31,440	172,304
Total val. all other Ag. Prod. ..	\$310,800	\$619,378
Total value of Ag. Prod.....	\$25,338,051	\$36,988,320

MANUFACTURES.		
Domestic Spirits.....	\$495,180	\$988,118
Oil Meal and Cake.....	21,136	256,863
Leather.....	2,101,940	2,522,162
Furniture.....	70,800	137,870
Bar and Pig Lead.....	59,040	126,403
Iron.....	842,910	507,561
Bloom and Bar Iron.....	362,100	521,12
Castings and Iron Ware.....	128,840	46,312
Domestic Woolens.....	316,800	213,107
Domestic Cottons.....	366,000	479,319

Domestic Salt.....	19,225	19,675
Foreign Salt.....	145	156
Total value of Manufactures.....	\$1,850,237	\$5,846,618
MERCHANDISE.		

Sugar.....	\$1,100	\$1,189
Molasses.....		60
Coffee.....	10,080	354
Nails, Spikes and Horse-Nails.....	140,251	145,543
Iron and Steel.....	232,240	235,073
Railroad Iron.....	120,660	171,819
Flint Enamel, Crockery, and		
Glass Ware.....	21,000	27,000
All other Merchandise.....	5,165,600	4,422,153

Total value of Merchandise..... \$6,620,930 \$5,131,635

OTHER ARTICLES.		
Live Cattle, Hogs and Sheep.....	\$25,100	\$125
Stone, Lime and Clay.....	263,565	192,065
Gypsum.....	4,653	2,129
Mineral Coal.....	70,400	73,681
Copper Ore.....	2,176,950	692,105
Sundries.....	3,728,769	3,693,116
Total value other Articles.....	6,266,978	4,521,301

Total value..... \$11,190,618 \$9,153,926

Albany Evening Journal.

AMERICAN LOCOMOTIVES IN EGYPT.

On the railroad between Alexandria (Egypt) and Suez, recently finished, there were four locomotives—two of them of English manufacture, and the other two were built at the Taunton Works, Massachusetts. It seems that the Pasha's cars are open to flattery, and the English engineers, through their consul, used every means to get rid of the American engineers. They were told by the railroad company that the engines would not be used, and their services would not be needed. The excuse for hauling them up was that they were not strong enough to haul the heavy trains. One of the American engineers, getting an opportunity to speak with the Pasha, told him he would haul as many loaded cars as would reach from one end of the road to the other. Accordingly, seventy-five heavily loaded cars—which was all they could muster—were put in a train, the Pasha's own car attached, and the whole were taken through to Suez, a distance of two hundred miles, in twelve hours, making stoppages for fuel and water. The Pasha exclaimed, in Egyptian: "God is great, but a Yankee is very near perfection!" On his return he discharged the English engineers, and now uses the Taunton engine altogether.

PENNSYLVANIA CENTRAL RAILROAD.

Our last issue contained an account of the starting, cost of construction, working and present capacity of this great road. We have been solicited to republish that article for the benefit of western merchants, but as we have not room for the whole of it, we give that part of it which shows its importance to those in the West trading with the East.

A table showing the saving on a ton (2240 lbs.) of first-class freight, by shipping from Philadelphia instead of New York or Boston.

	New York.		Boston.	
	Sum'r.	Win'r.	Sum'r.	Win'r.
To Columbus, O.....	\$7.9	\$6.73	\$8.51	\$8.96
Dayton, O.....	7.39	6.72	8.51	8.96
Cincinnati, O.....	7.39	6.72	8.51	8.96
Indianapolis, Ind.....	6.27	6.72	7.19	8.96
Louisville, Ky.....	4.03	6.72	5.15	8.96
Terre Haute, Ind.....	5.15	6.72	7.39	8.96
Ft. Wayne, Ind.....	4.03	6.30	4.03	8.74
Lafayette, Ind.....	3.58	6.05	4.70	8.29
St. Louis, Mo.....	2.24	6.72	6.27	8.96
Cairo.....	45	6.72	4.48	8.96
Cleveland.....	1.79	3.36	2.91	5.60
Chicago, Ill.....	1.79	4.48	1.79	4.43

These tables demonstrate, conclusively, that every shipper who, during the past year, sent western merchandise by railroad from the points designated, to New York or Boston, that could have been sold as well in

Philadelphia—every western merchant who purchased goods in these cities on better terms than he could have purchased them in Philadelphia, and sent them home by railroad, expended unnecessarily, or in other words, lost from one dollar and seventy-nine cents to eight dollars and ninety-six cents on every ton usually classed as first-class freight. These are the facts, and the deductions from facts, with respect to shipments "all the way by railroad."

But Philadelphia has a very important advantage, in addition to that stated in the tables, by communicating at Pittsburg with thousands of miles of safe river navigation, extending southwardly to New Orleans and the ocean, and westwardly to St. Paul, on the Mississippi; and, in fact, to all the cities and towns on navigable waters east of the Rocky Mountains. The advantage in shipping from Philadelphia to Pittsburg, and thence by the Ohio river to Cincinnati and Louisville, over shipping to those points by the northern railroad lines, amounts, in addition to the saving stated above, to about \$5 per ton on first-class goods, \$4 on second, \$3 on third-class, and \$2 on very heavy goods; while to Nashville, Memphis, Cairo, St. Louis, and all points south of New Albany, Ind., the additional saving is nearly double this amount—that is, about \$10 per ton on first-class goods, \$8 on second, \$6 on third, and about \$3 per ton on fourth-class. It is thus evident, as experienced shippers know, that freight from the West, bound for European markets, can be brought to Philadelphia, and shipped hence, landing at its destined port abroad, at cheaper paying rates than by any other way. Indeed, the leading products of the West—for instance, flour, the products of the hog, &c., can be shipped to Philadelphia, and hence at least half the distance to Liverpool, for the cost of transporting them to places further East. In view of the facts stated, it is also obvious that a Western merchant purchasing goods in Philadelphia, may have his preference rewarded by a saving in the cost of transporting them home. Thus, whether we view the commercial metropolis of Pennsylvania, with reference to her facilities for getting goods at the lowest cost, the vast development of her manufactures, or the completion of railway facilities for the transportation and distribution of goods, every one must admit that now, at least, if never before, Philadelphia is ready to do business, and that she is now unquestionably THE BEST JOBBING MART IN THE UNITED STATES.

Our paper containing that article has doubtless been read by more than thirty thousand merchants in the Middle, Western and Southern States, and has awakened a lively interest in matters relating to cost of transportation. The fact that our "Central" is beginning to attract attention may be seen from the following sensible letter of a Chicago merchant, which appeared in the New York Evening Post, of one day last week.

"To the Editors of the Evening Post:—In a paragraph in your money article of Friday, the writer appears to argue that, because the Pennsylvania Railroad is a shorter route, because its earnings per mile are greater than any of its rival routes, and have been gradually increasing; because it has a direct connection with Chicago and the Northwest, via the Pittsburg, Fort Wayne and Chicago Road (recently completed through,) and because it is well and economically managed, therefore the New York and Erie and Central Roads should adopt measures to prevent

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 FOR
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 PATENTED, NOV. 2, 1858.

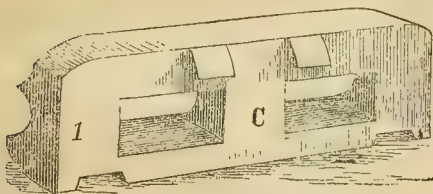


Fig. 3 is a perspective view of Joint Rail. Fig. 1 is a view of outside plate C, which is applied on the outer side of the joint. It is intended to stand up flush with the face of the rails, so that it may form an unbroken bearing for the wheels, as they pass the square extremities of the rails. This plate may be of such form as to fill up the recess in the side of the rail, between the head and base, or only to bear against the head and upon the base, leaving an open space between it and the neck of the rail. The last mentioned form is the one shown in the drawing. In either case the lower part of said plate rests partly upon the base of the rails, and partly upon the outside lip of the chair, as shown in Fig. 3.

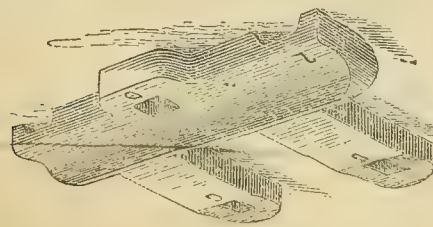
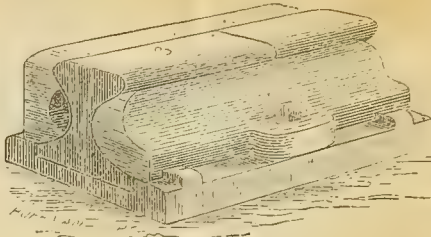


Fig. 2 is a view of inside plate D, which is applied on the inner side of the joint. This plate must fit into the recess in the side of the rail, as its upper part can not project laterally beyond the head of the rails, or it would interfere with the flanges of the wheels. And its lower part, like the lower part of plate C, rests partly upon the base of the rails, and partly upon the inside lip of the chair, as shown in the model. From the inner side of this plate, projects two strong horizontal tongues C C, which pass through slots in the ends of the rails, and corresponding ones in the outside plate C. These tongues rest upon projections, which are provided on the chair to stand up outside of the plate C, to act as bearings for the tongues C C, and serving, also, in part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint by spikes passing through the chair and down the edge of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

part, to confine the plate C. The ends of the tongues are furnished with vertical slots to receive keys, which are driven through them, and corresponding vertical slots in the chair. The rails and chair are secured to the joint by spikes passing through the chair and down the edge of the base of the rails, in the usual manner; and the heads of these spikes are covered by the plates C and D, in which recesses are provided for them in such a manner as to prevent the possibility of the spikes being withdrawn while the plates are in their place.

The plates C and D, constructed, and applied, and tongued together, by the tongues passing through the rails, and secured by keys, as described, clamp and lock the rails together, both vertically and laterally, in the firmest possible manner, so that neither can move without the other. One of the advantages this invention claims over all others, is the introduction of two peculiarly constructed side-clamping plates, in combination with a corresponding chair. The inside plate has two strong horizontal tongues, with vertical slots in the ends of the rails, and corresponding ones in the outside plate. By driving through two keys, they clamp and lock the plates firmly together, so that neither can move without the other.



Another great advantage is, the allowance which is made for expansion and contraction between the tongues and slots in the rails, so that they can not shove together, as in the present mode of fastening them—each joint acting independent of the other. This mode of securing rails may be considered past improvement. It will be seen that one part assists and takes the strain off the other, in such a manner that there is no particular strain on any part of the joint, which must wear smooth and make a perfect self-road, thereby doing away with the breaking of rails, wheels, and axles, preventing the loss of life and destruction of property, and saving at least fifty per cent. on the wear of the rolling stock of the road.

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